THOMSON

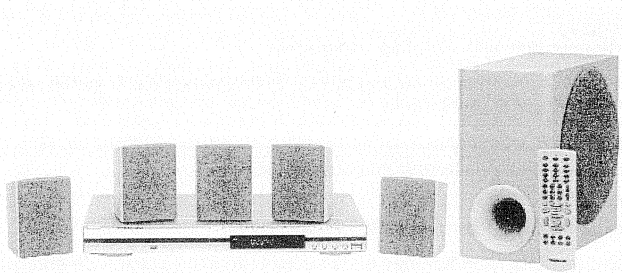
AUDIO

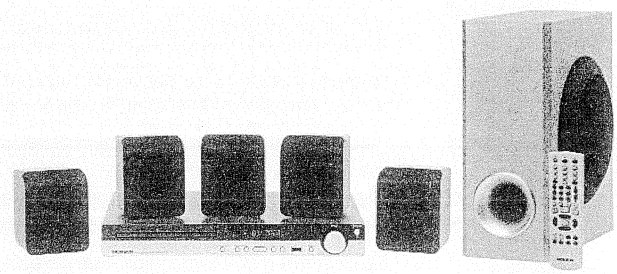
SERVICE MANUAL
DOCUMENTATION TECHNIQUE
TECHNISCHE DOKUMENTATION
DOCUMENTAZIONE TECNICA
DOCUMENTACION TECNICA

DPL 914 VD
DPL 917 VD

Version (PC*): A

*PC: The version code is indicated either in the battery compartment or on the back of the unit - ce code version est indiqué dans le compartiment à piles ou au dos de l'appareil - PC: Version des Geräts wird im Batteriefach oder auf der Rückseite angegeben - il codice della versione è indicado nello scompartimento delle batterie o sul retro dell'apparecchio - el código de la versión está indicado en el compartimento de las pilas o en la parte trasera del aparato.

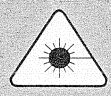




Technical data - Caractéristiques principales
Technische Daten - Dati tecnici - Caracteristicas del aparato

Type of set : Type d'appareil : Geräteart : Tipo d'apparecchio : Tipo de aparato :	Stereo pre-main amplifier - DVD Préampli-ampli stéréophonique - DVD Stéreo-Vollverstärker - DVD Preamplificatore-amplificatore stereo -DVD Préamplificador-amplificador estereo -DVD		360 mm 40 mm 250 mm 1 kg
Power supply : Alimentation : Stromversorgung : Alimentazione : Alimentación :	~ 230 V - 50Hz	Nominal output power : Puissance nominale de sortie : Nennausgangsleistung : Potenza nominale di uscita : Potencia nominal de salida :	5 x 10 W 1 x 25 W
FM - MF :	87,5 - 108 MHz	Sensitivity : Sensibilité : Empfindlichkeit : FM - MF : Sensibilità : Sensibilidad :	18 µV (S/N = 30 dB)
DVD Standard : Standard : Norm : Stantard : Estandar :	PAL and NTSC	Signal to noise ratio : Rapport signal / bruit : Geräuschspannungsabstand : Rapporto segnale / disturbo : Relación señal / ruido :	95 dB

WARNING : *Before servicing this chassis please read the safety recommendations.*
ATTENTION : *Avant toute intervention sur ce châssis, lire les recommandations de sécurité.*
ACHTUNG : *Vor jedem Eingriff auf diesem Chassis, die Sicherheitsvorschriften lesen.*
ATTENZIONE : *Prima di intervenire sullo chassis, leggere le norme di sicurezza.*
IMPORTANTE : *Antes de cualquier intervención, leer las recomendaciones de seguridad.*



CLASS 1 LASER PRODUCT
APPAREIL A LASER DE CLASSE 1
LASER KLASSE 1
APARATO CON LASER DE CLASE 1
APPARECCHIO CON LASER DI CLASSE 1

DANGER : **Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.**

ATTENTION : **Le rayon laser est invisible. Eviter l'exposition directe lors de la maintenance.**

VORSICHT BEI REPARATUREN : **Bei geöffneter Schublade und Defekt der Sicherheits - vorrichtungen besteht die Gefahr unsichtbaren Laserlichts. Niemals direkt in den Laserstrahl sehen.**

ATTENZIONE : **Il raggio laser è invisible. Evitare l'esposizione diretta durante la manutenzione.**

IMPORTANTE : **El rayo laser es invisible. Evitar la exposición directa en el momento del mantenimiento.**

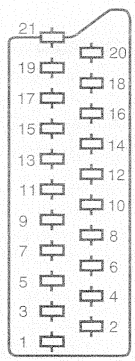
Do not disconnect modules when they are energized!
Repairs on power supply section are to be carried out only with isolating transformer.

Ne pas retirer les modules lorsqu' ils sont sous tension. N'effectuer les travaux de maintenance sur la partie reliée au secteur (Switch Mode) qu'au travers d'un transformateur d'isolement.

Module nicht bei eingeschaltetem Gerät entfernen!
Servicearbeiten am Netzteil nur unter Verwendung eines Regeltrenntrafos durchführen.

Non scollegare le piastre quando sono alimentate!
Per le riparazioni sulla sezione alimentatore, utilizzare un trasformatore isolatore.

No desconectar los módulos cuando están activados. Las reparaciones en la sección de alimentación de energía deben ser ejecutadas solamente con un transformador de separación.



NOTE : (MAIN) ... *etc. identifies each* pcb module.

NOTE : (MAIN) ... *etc. repères des platines constituant l'appareil.*

HINWEIS : (MAIN) ... *usw. Kennzeichnung der Platinen, aus denen das Gerät zusammengesetzt ist.*

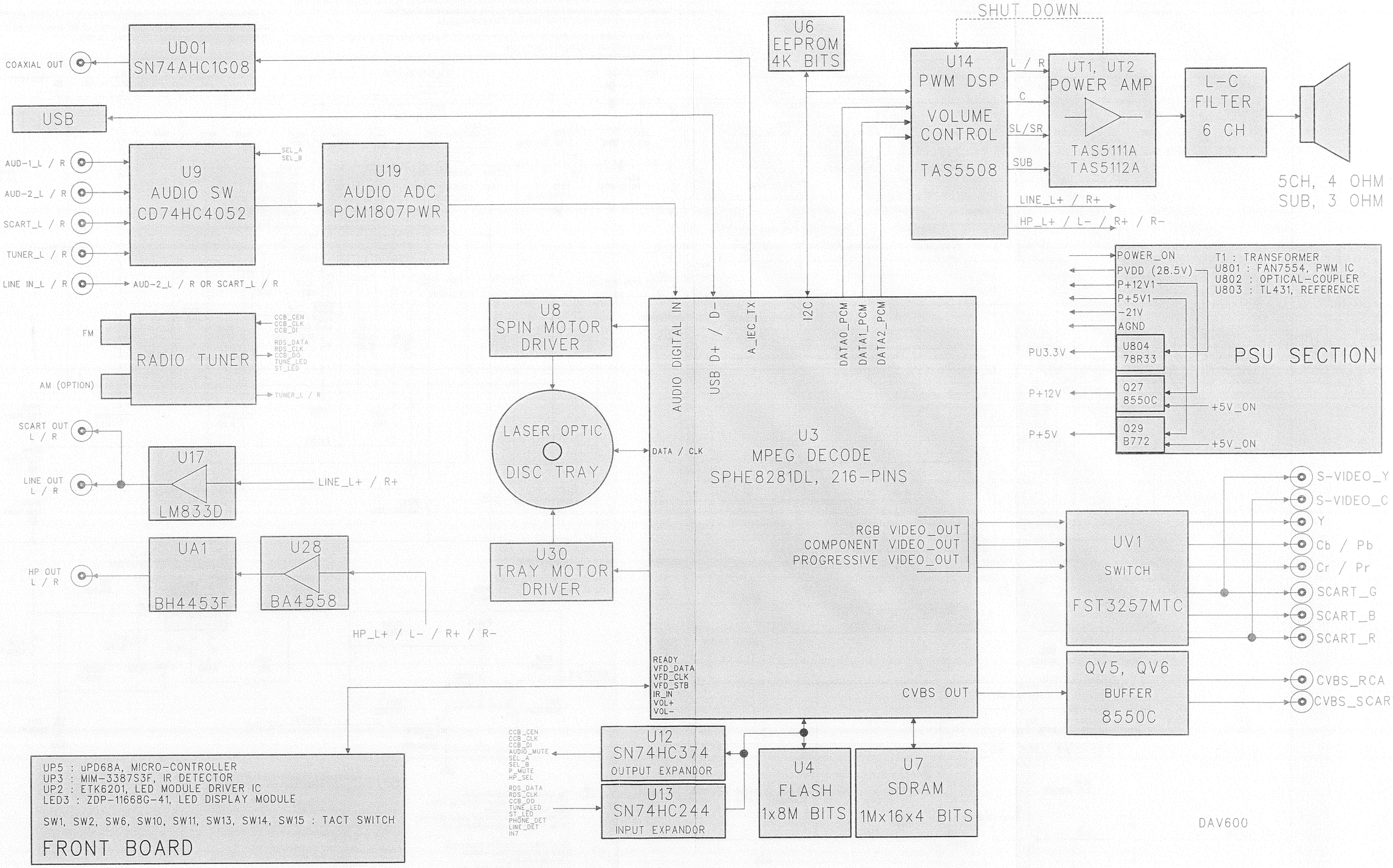
NOTA : (MAIN) ... *ecc. sigla delle piastre dell' apparecchio.*

NOTA : (MAIN) ... *etc. marcas de las placas que constituyen el aparato.*

		ENGLISH	FRANÇAIS	DEUTSCH	ITALIANO	ESPAÑOL
1	⊖	AUDIO "R"	AUDIO "D"	AUDIO "R"	AUDIO "D"	AUDIO "D"
2	⊕	AUDIO "R"	AUDIO "D"	AUDIO "R"	AUDIO "D"	AUDIO "D"
3	⊖	AUDIO "L"	AUDIO "G"	AUDIO "L"	AUDIO "S"	AUDIO "I"
4	⊥	AUDIO	AUDIO	AUDIO	AUDIO	AUDIO
5	⊥	"BLUE"	"BLEU"	"BLAU"	"BLU"	"AZUL"
6	⊕	AUDIO "L" MONO	AUDIO "G" MONO	AUDIO "L" MONO	AUDIO "S" MONO	AUDIO "I" MONO
7	⊕	"BLUE"	"BLEU"	"BLAU"	BLU	AZUL
8	⊕	SLOW SWITCH	COMMUT. LENTE	AV UMSCHALTUNG	"COMMUTAZIONE LENTA"	"CONMUTACION LENTA"
9	⊥	"GREEN"	"VERT"	"GRÜN"	"VERDE"	"VERDE"
10	⊕ ⊖	AV LINK	AV LINK	AV LINK	AV LINK	AV LINK
11	⊕	"GREEN"	"VERT"	"GRÜN"	"VERDE"	"VERDE"
12	NC					
13	⊥	"RED"	"ROUGE"	"ROT"	"ROSSO"	"ROJA"
14	NC					
15	⊕	"RED"	"ROUGE"	"ROT"	"ROSSO"	"ROJA"
16	⊕	FAST SWITCH	COMMUT. RAPIDE	AUSTASTUNG	"COMMUTAZIONE RAPIDA"	"CONMUTACION RAPIDA"
17	⊥	VIDEO	VIDEO	VIDEO	VIDEO	VIDEO
18	⊥	FAST SWITCH	COMMUT. RAPIDE	AUSTASTUNG	"COMMUTAZIONE RAPIDA"	"CONMUTACION RAPIDA"
19	⊖	VIDEO	VIDEO	VIDEO	VIDEO	VIDEO
20	⊕	VIDEO OR "SYNC"	VIDEO SYNCHRO	VIDEO ODER SYNCHRO	VIDEO O SINCRO	VIDEO O SINCRO
21	⊖	PLUG SCREEN BOX	BLINDAGE PRISE	ABSCHIRMUNG DES STECKERS	INVOLUCRO METAL-LICO DELLA PRESA	BLINDAJE DEL ENCHUFE

⊕ : INPUT - ENTRÉE - EINGANG - ENTRATA - ENTRADA • ⊖ : OUTPUT - SORTIE - AUSGANG - USCITA - SALIDA • ⊥ : EARTH - MASSE - MASSE - MASSA - MASA

BLOCK DIAGRAM - SCHEMA SYNOPTIQUE - BLOCKSCHALTBILD - SCHEMA A BLOCCHI - ESQUEMA DE BLOQUES



MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD GRUNDPLATTE - SCHEMA DELLA PIASTRA PRINCIPALE - ESQUEMA DE LA PLATINA PRINCIPAL

MAIN

⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be garanteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraine la non-conformité de l'appareil. Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) durch nicht normgerechte Teile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione degli elementi di sicurezza (marcati con il segno ⚠) con componenenti non omologati secondo la norma CEI 65 comporta la non conformitá dell'apparecchio. In tal caso é "esclusa la responsabilitá" dei costruttore.

La subtitución de elementos de seguridad (marcados con el simbolo ⚠) por componentes no homologados segun la norma CEI 65, provoca la no conformidad del aparato. En ese caso, el fabricante cesa de ser responsable.

D804 1N5408, AXIAL
D803 1N5408, AXIAL
D802 1N5408, AXIAL
D801 1N5408, AXIAL
R828 680K, 1/2W AXIAL
HV
+ C801 82U/400V
D806 1N4007, AXIAL
T=14 µs
400 Vpp
R802 47R, 2W AXIAL
C802 4700P, 1KV AXIAL
R803 33K, 2W AXIAL
D805 FR207, AXIAL
FB801 FB, AXIAL
R805 100K, 2W AXIAL
D807 FR103, AXIAL
R806 22R, 1206
L801 39m H ET20 TRANSFORMER
CX801 0.47U, 275V AXIAL
R801 OPEN *
VT801 FNR-10K471, AXIAL
RT801 NTC 5D-11, AXIAL
F801 3.15AL, 250VAC
CY801 1000P, 250V AXIAL
CY802 1000P, 250V AXIAL
GND
TP93
TP92
SK1 OPEN
N
L
C803 47U/35V, 105C
C808 0.1U
U801 FAN7554, DIP
Vstr Vref cs/fb Vcc Latch Out Rt/Ct gnd
R807 5K1, 1%
R808 22R, 1206
D808 LL4148
Q801 SSS4N60B, TO-220
T1 EE28 TRANSFORMER
R809 1K
C804 0.01U
C807 4700P
C805 2.2U/50V
C806 1000P
R810 10K
R811 0.47R, 2W AXIAL
HVGND
PSC
T=15 µs
1v
18Vpp-H
Stb/ON
CY803 1000P, 250V AXIAL
HV
AGND

D809 U 003FCT, TO-220
L802 10.5uHDR6*25, AXIAL
C811 2200U/35V, 105C
R812 4R7, 2W AXIAL
C809 2200P, 1KV AXIAL
+ C810 1000U/35V, 105C
R813 0R
D811 FR103, AXIAL
D810 SR560, AXIAL
L804 10uHDR6*8, AXIAL
L803 30uHDR9*12, AXIAL
R814 10K
R815 4K7
R826 1M
R817 62K, 1%
R804 2K2, 2W AXIAL
R821 2K2, 2W AXIAL
PVDD1
TP89 TEST POINT
PVDD
U31 SOLDER
PVDD-
FB617 FB, AXIAL
U802 PS2561-1-V, DIP
PSC
HVGND
POWER_ON
C822 OPEN *
C812 0.1U, 50V
D812 FR103, AXIAL (VFD -22V)
C816 1000U /16V, 105C
C819 1000U /10V, 105C
C820 1000U/10V
R822 3K6
C817 1000U /16V
R816 6K8
C813 0.1U
U803 TL431, AXIAL
R819 3K9, 1%
R820 OPEN *
R818 2K2, 1%
AGND
C821 0.1U
C818 0.1U
TP208 TEST POINT
TP209 TEST POINT
P+12V1
P+5V1
C814 47U/35V (VFD -22V)
R824 20K (VFD -22V)
TP210 TEST POINT
-21V
R823 10R (VFD -22V)

U26 SOLDER
Q27 8550C, TO-92
P+12V1
R5201 0R, 1206 (UL)
P+12V
P+5V
P+5V1
U27 SOLDER
Q29 B772, TO-220 (CE)
ZT6 HOLE
R346 47R, 1206 (CE)
R347 1K
C219 100U/16V
C220 0.1U
C221 100U/16V
C222 0.1U
Q35 8050C, TO-92 (CE)
R5200 0R (CE)
[2,9] +5V_ON
R5203 OPEN *
[2,9] ON_OFF
Q30 8050C
R348 10K
READY
[2,4]
AGND
* according to models

TP94 TEST POINT
U29 SOLDER
PU3.3V
U804 78R33, TO-220
Vin GND ON/OFF Vout
R353 0R (UL)
R5204 OPEN *
PVDD1
R825 2K2
C815 10U/16V
R350 OPEN *
DVCC3
POWER_ON
R352 0R (CE)
R349 10K (CE)
Q33 8050C (CE)
R351 10K (CE)
Q34 8050C (CE)
ON_OFF
[2,9]
P+5V1
R5205 OPEN *
ZT11 OPEN *
GND

⚠ Use isolating mains transformeur
Utiliser un transformateur isolateur du secteur
Einer Trenntrafo verwenden
Utilizare un transformatore per isolarvi dalla rete
Utilizar un transformador aislador de red

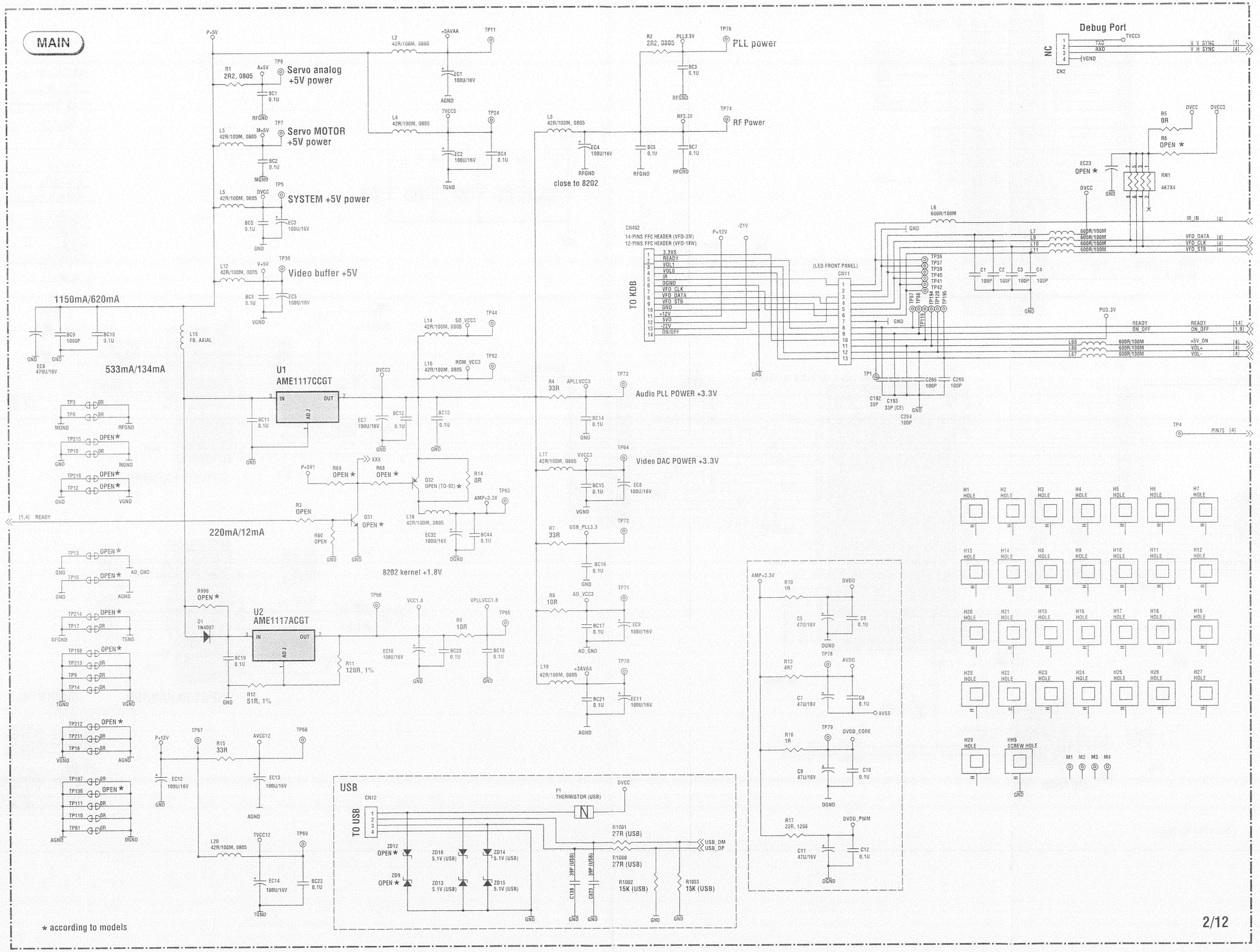
Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello châssis collegata alla rete.
Parte del chassis conectar a la red.

Note :
During measurements in the power supply unit
- Use the primary power unit ground (HGND).
Attention :
Mesure dans la partie primaire de l'alimentation
- Utiliser la masse du bloc alimentation (HGND).
Achtung :
Bei Messungen im Primärnetzteil
- Primärnetzteilmasse verwenden (HGND).
Attenzione :
Misure nell'alimentatore primario
- usare massa alimentazione primario (HGND).
Cuidado :
Medida en el bloque de alimentación
- Utilizar la masa del bloque de alimentación (HGND).

1/12

ASMP1130
First issue 06/06

MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD GRUNDPLATTE - SCHEMA DELLA PIASTRA PRINCIPALE - ESQUEMA DE LA PLATINA PRINCIPAL



MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD GRUNDPLATTE - SCHEMA DELLA PIASTRA PRINCIPALE - ESQUEMA DE LA PLATINA PRINCIPAL

MAIN

U4
SST39VF088-70-4C-EKE, TSOP-48

RA1 25 A0 | DQ0 29 RD0
RA2 24 A1 | DQ1 31 RD1
RA3 23 A2 | DQ2 33 RD2
RA4 22 A3 | DQ3 35 RD3
RA5 21 A4 | DQ4 38 RD4
RA6 20 A5 | DQ5 40 RD5
RA7 19 A6 | DQ6 42 RD6
RA8 18 A7 | DQ7 44 RD7
RA9 8 A8 | DQ8 30
RA10 7 A9 | DQ9 32
RA11 6 A10 | DQ10 34
RA12 5 A11 | DQ11 36
RA13 4 A12 | DQ12 39
RA14 3 A13 | DQ13 41
RA15 2 A14 | DQ14 43
RA16 1 A15 | DQ15/A-1 45 RA0
RA17 48 A16
RA18 17 A17
RA19 16 A18
NC 9
NC 10
NC 13
NC 14
NC 15 RY/BY
R_CS1 R274 33R 26 CE
ROE R275 33R 28 OE
RWE R276 33R 11 WE
RESET_B 12 RST
37 VCC FLASH_POWER
GND 47 BYTE
46 GND
27 GND

FLASH_POWER
R64 OPEN * DVCC
R67 0R ROM_VCC3

BC45 0.1U GND

SD_VCC3
EC22 47U/16V
BC47 0.1U
BC48 0.1U
BC49 0.1U
BC50 0.1U
GND

SEL_A [7]
SEL_B [7]
RESET_B 4,9
RA[0..19] [4]
RD[0..7] [4]
ROE [4]
RWE [4]
R_CS1 [4]
R_CS4 [4]
MA[0..11] [4]
MD[0..15] [4]
DQM[0..1] [4]
M_CS0 [4]
M_CAS [4]
M_RAS [4]
MWE [4]
M_CKE [4]
M_BA0 [4]
M_BA1 [4]

U7
MT48LC4M16A2TG-75ES (1M X 16-BITS X 4), TSOPII

[4] MA[0..11]
MA0 23 A0 | D0 2 MD0
MA1 24 A1 | D1 4 MD1
MA2 25 A2 | D2 5 MD2
MA3 26 A3 | D3 7 MD3
MA4 29 A4 | D4 8 MD4
MA5 30 A5 | D5 10 MD5
MA6 31 A6 | D6 11 MD6
MA7 32 A7 | D7 13 MD7
MA8 33 A8 | D8 42 MD8
MA9 34 A9 | D9 44 MD9
MA10 22 A10/AP | D10 45 MD10
MA11 35 A11 | D11 47 MD11
LDQM 15 | D12 48 MD12
UDQM 39 | D13 50 MD13
WE 16 | D14 51 MD14
CAS 17 | D15 53 MD15
RAS 18 | NC 36
CS 19 | NC/RFU 40
CKE 37 | VSS 28 GND
CLK 38 | VSS 41 GND
BA0 20 | VSS 54 GND
BA1 21 | VDD 1
VDD 14
VDD 27
VDD 3
VSSq 6 | VDDq 8
VSSq 12 | VDDq 9
VSSq 46 | VDDq 43
VSSq 52 | VDDq 49
SD_VCC3

RN2 33RX4: MD0 MD1 MD2 MD3
RN3 33RX4: MD4 MD5 MD6 MD7
RN4 33RX4: MD8 MD9 MD10 MD11
RN5 33RX4: MD12 MD13 MD14 MD15

MD[0..15] [4]

[4] DQM0 R278 33R
[4] DQM1 R277 33R
[4] MWE R320 33R
[4] M_CAS R321 33R
[4] M_RAS R322 33R
[4] M_CS0 R323 33R
[4] M_CKE R280 33R
[4] SDRAM_CLK R279 33R
M_BA0 R281 33R
M_BA1 R282 33R
L33 0R
TP116

C85 OPEN *
C46 10P
GND GND GND

DVCC
R65 1K
R66 1K

U6
AT24C04N-10SI-2.7

A0 1 | VCC 8 DVCC
A1 2 | WP 7 GND
A2 3 | SCL 6 SP_SCL [4,9]
GND 4 | SDA 5 SP_SDA [4,9]
GND

I2C ADDR = 0XA0

ROE
R_CS4
D14 LL4148
D15 LL4148
DVCC3
R169 2K
374CLK

U12
SN74HC374DWR

RA0 3 1D | 1Q 2 CCB_CEN
RA1 4 2D | 2Q 5 CCB_CLK
RA2 7 3D | 3Q 6 CCB_DI
RA3 8 4D | 4Q 9
RA4 13 5D | 5Q 12 SEL_A
RA5 14 6D | 6Q 15 SEL_B
RA6 17 7D | 7Q 16 P_MUTE [9]
RA7 18 8D | 8Q 19 HP_SEL HP_SEL [9]
374CLK 11 CLK
OE 1 | GND 10 GND
20 VCC

D19
OPEN *
VALID2 [9]
R168 0R
AUDIO_MUTE [9]

OUTPUT EXPANDER

U13
SN74HC244DWR

RDS_DATA 2 1A1 | 1Y1 18 RD0
RDS_CLK 4 1A2 | 1Y2 16 RD1
CCB_DO 6 1A3 | 1Y3 14 RD2
TUNE_LED 8 1A4 | 1Y4 12 RD3
ST_LED 11 2A1 | 2Y1 9 RD4
[7] PHONE_DET 13 2A2 | 2Y2 7 RD5
[7] LINE_DET 15 2A3 | 2Y3 5 RD6
TP75 IN7 17 2A4 | 2Y4 3 RD7
R_CS4 1 1OE
19 2OE | GND 10 GND
DVCC3 20 VCC

INPUT EXPANDER

TUNER GPIO

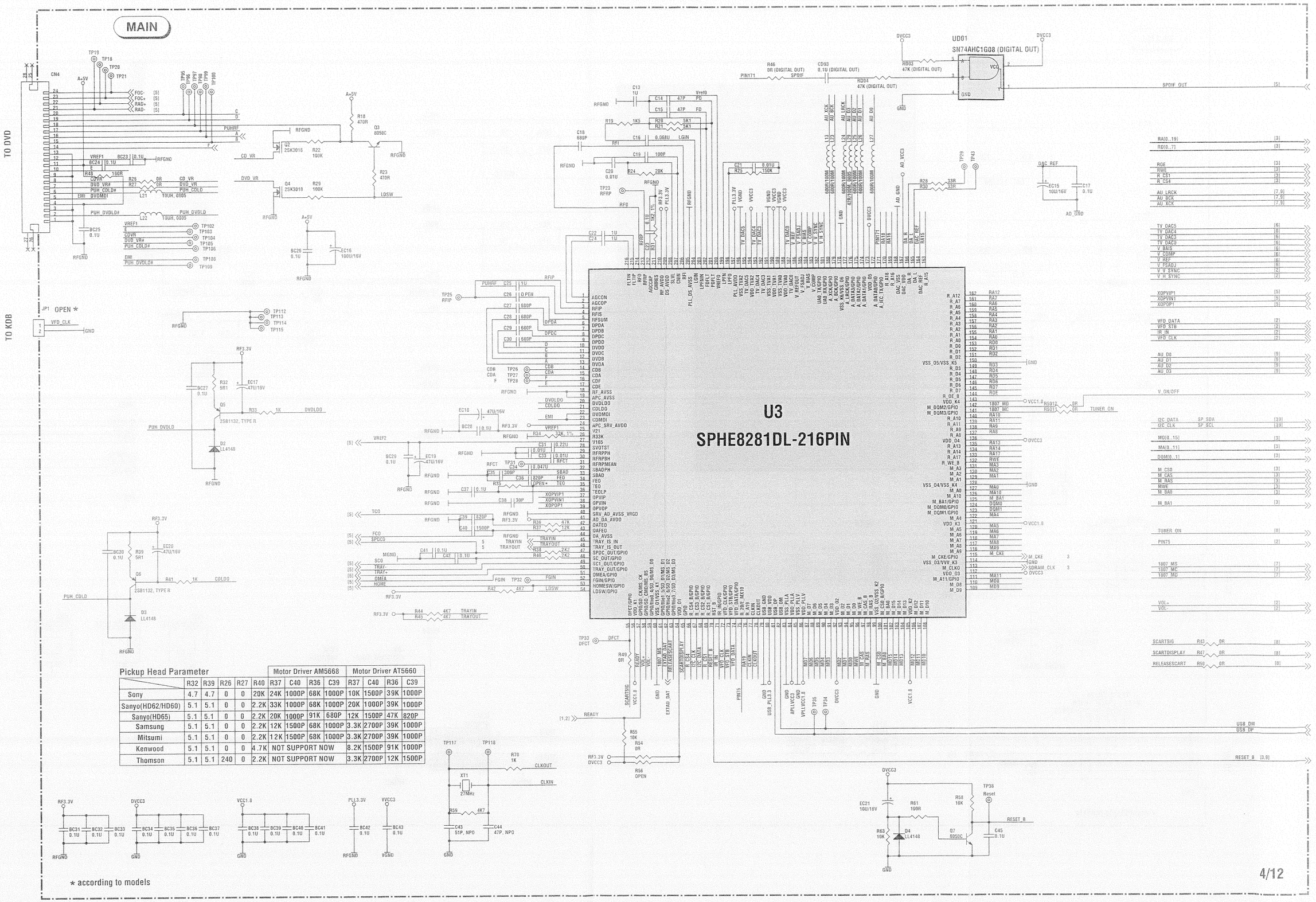
CCB_DO CCB_DO [8]
CCB_CLK CCB_CLK [8]
CCB_DI CCB_DI [8]
CCB_CEN CCB_CEN [8]
RDS_CLK RDS_CLK [8]
RDS_DATA RDS_DATA [8]
TUNER_ON TUNER_ON [4,8]
TUNE_LED TUNE_LED [8]
ST_LED ST_LED [8]

3/12

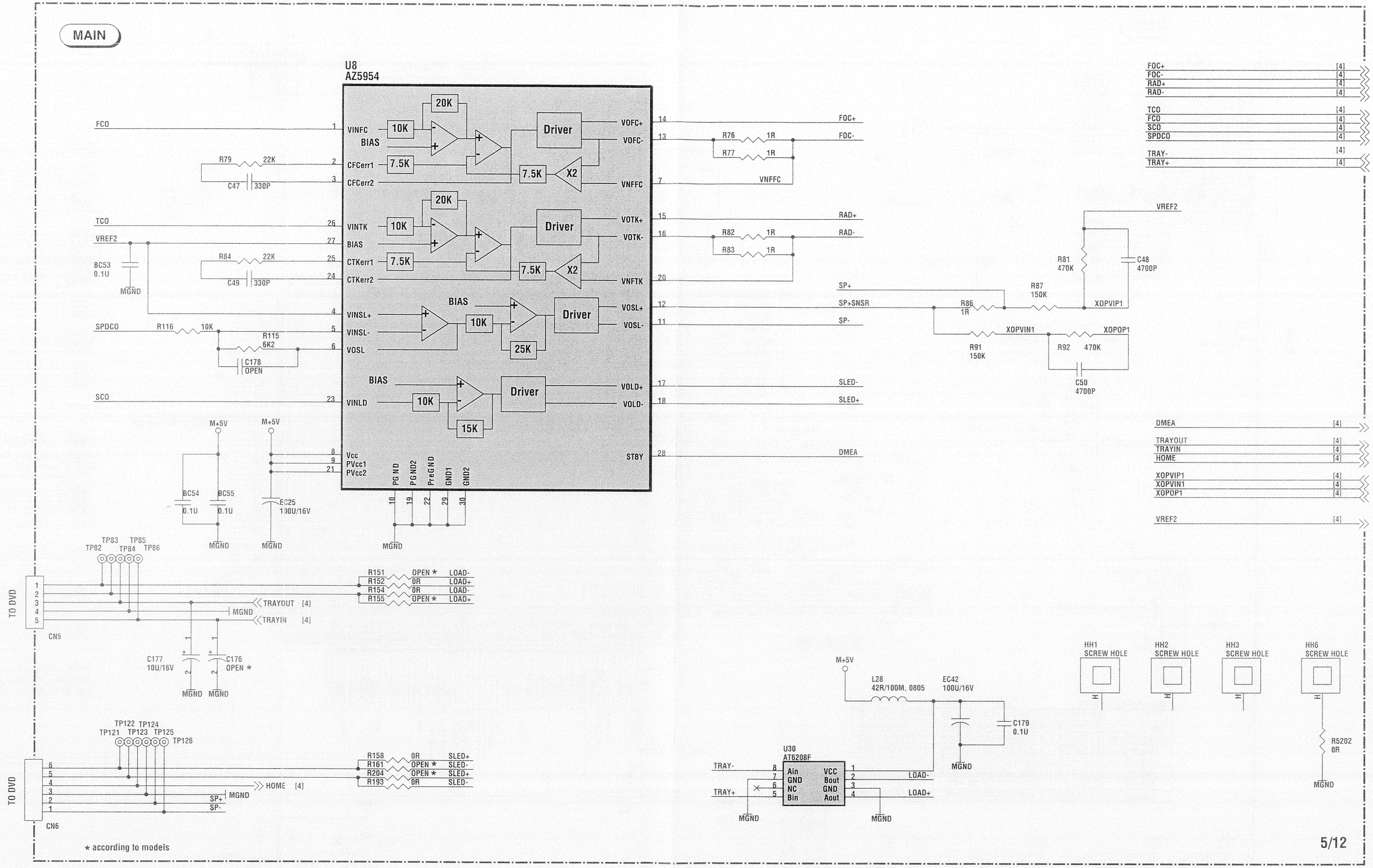
* according to models

ASMP1130
First issue 06/06

MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD GRUNDPLATTE - SCHEMA DELLA PIASTRA PRINCIPALE - ESQUEMA DE LA PLATINA PRINCIPAL



MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD GRUNDPLATTE - SCHEMA DELLA PIASTRA PRINCIPALE - ESQUEMA DE LA PLATINA PRINCIPAL



MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD GRUNDPLATTE - SCHEMA DELLA PIASTRA PRINCIPALE - ESQUEMA DE LA PLATINA PRINCIPAL

MAIN

VVCC3 — C51 OPEN — V_BIAS [4]
VGND — C52 0.1U

1/2 current config

VVCC3 — C53 0.1U — V_COMP [4]
VGND — C54 0.1U — V_REF [4]
VGND — V_FSADJ [4]
R99 360R, 1%

TV0	TV3	TV4	TV5
CVBS	Y	Cb	Cr
CVBS	Y (S-Video)	CVBS	C (S-Video)
CVBS	G	B	R

R96 75R, 1% — TV_DAC0 [4]
R97 75R, 1% — TV_DAC3 [4]
TV_DAC4 [4]
TV_DAC5 [4]
R98 82R, 1%
R95 82R, 1%
VGND

TP127 — R104 0R — TV_DAC0
C55 10P, L36 1UH, 0805, C57 100P, C58 100P, R114 75R (VIN_IN) — CVBS [8]
VGND VGND

TP128 — R51 0R — TV_DAC5
C56 10P, L37 1UH, 0805, C59 100P, C60 100P, R117 OPEN * — R/V_O/SC [8]
VGND VGND

TP129 — R52 0R — TV_DAC3
C61 10P, L38 1UH, 0805, C63 100P, C64 100P, R118 OPEN * — G/Y_O/SY [8]
VGND VGND

TP130 — R53 0R — TV_DAC4
C62 10P, L39 1UH, 0805, C65 100P, C66 100P, R124 OPEN * — B/U_O [8]
VGND VGND

R125 47K
R244 33R — AVCC12
C120 120P
C166 0.1U, C261 47U/16V — AGND
TP133 — [4] LINE_R+ — C173 10U/16V — R133 4K7 — R134 18K — C121 1500P — AGND
TP134 — [4] LINE_L+ — C174 10U/16V — R148 4K7 — R149 18K — C169 1500P — AGND
U17 RC4558D (UL), LM833D (CE) — VCC, GND
C167 120P — AGND
R142 47K
TP131 — C170 10U/16V — R242 330R — AFR [8]
TP132 — R246 47K — AGND
R250 0R — Q24 8050C, TO-92 — AGND
Q36 8550C — R256 10K
R263 510R
R261 330R — AFL [8]
C185 10U/16V — R264 47K — AGND
Q25 8050C, TO-92 — AGND
R269 0R
Q26 8550C — R271 10K
R262 510R
P+5V — PU3.3V — DA2 LL4148 — DA3 LL4148
R267 510R — C191 1000U/10V — AGND AGND

AVCC12 — R257 4K7 — 1/2AVCC — R260 4K7 — AGND
R319 10K
C218 100U/16V — AGND
C184 0.1U — AGND
AVCC12 — C163 100U/16V — C165 0.1U — AGND

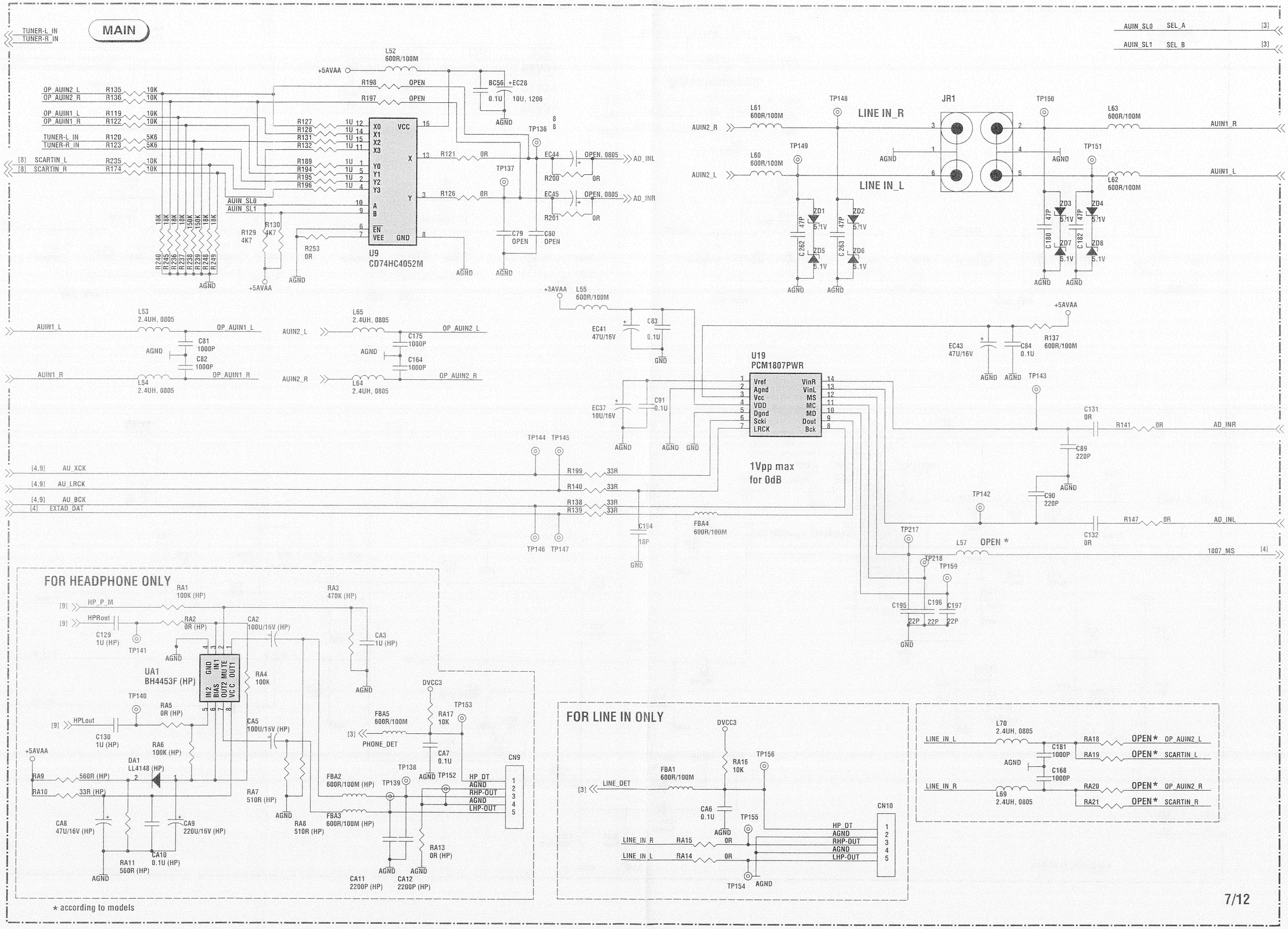
AVCC12 — R272 2K2
P+5V — R270 10K
PU3.3V — R266 OPEN * — R259 10K
DVCC3 — R265 1K — TP135
R283 910R
Q28 8050C — AGND
P_MUTE
HP_P_M — HP_P_M
R268 2K2 — AGND
DA4 OPEN *
ON_OFF

[8] AFR
[8] AFL

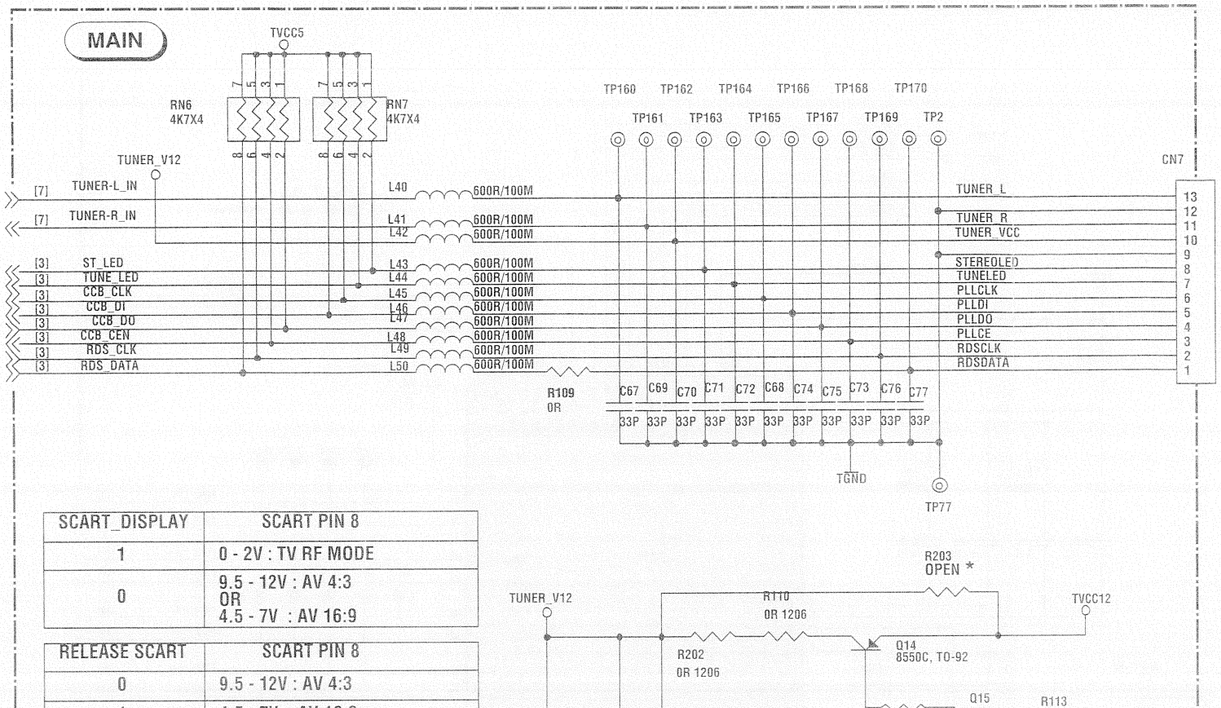
* according to models

6/12

MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD GRUNDPLATTE - SCHEMA DELLA PIASTRA PRINCIPALE - ESQUEMA DE LA PLATINA PRINCIPAL



ASMP1130
First issue 06/06



SCART_DISPLAY	SCART PIN 8
1	0 - 2V : TV RF MODE
0	9.5 - 12V : AV 4:3 OR 4.5 - 7V : AV 16:9

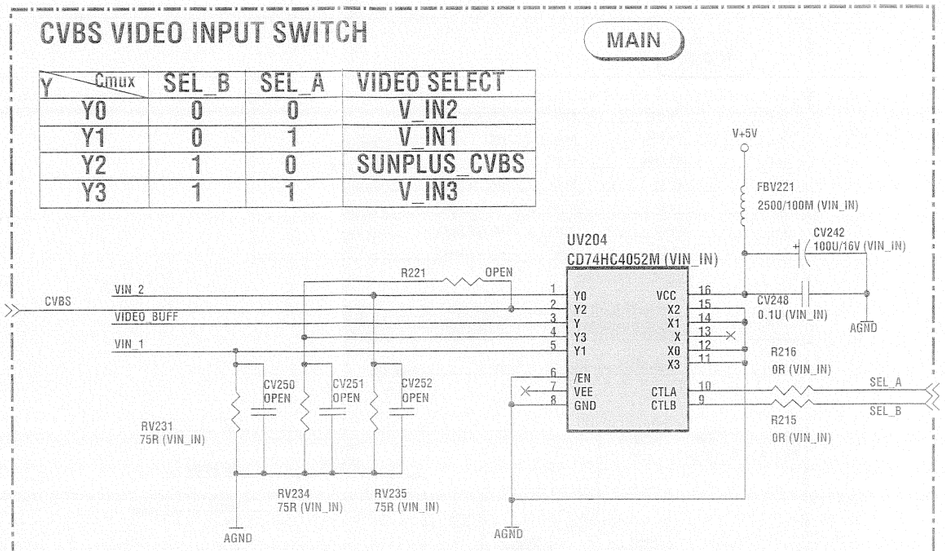
RELEASE SCART	SCART PIN 8
0	9.5 - 12V : AV 4:3
1	4.5 - 7V : AV 16:9

SCART_SIG	SCART PIN 16
0	0 - 0.4 : INTERNAL
1	1 - 3V : EXTERNAL

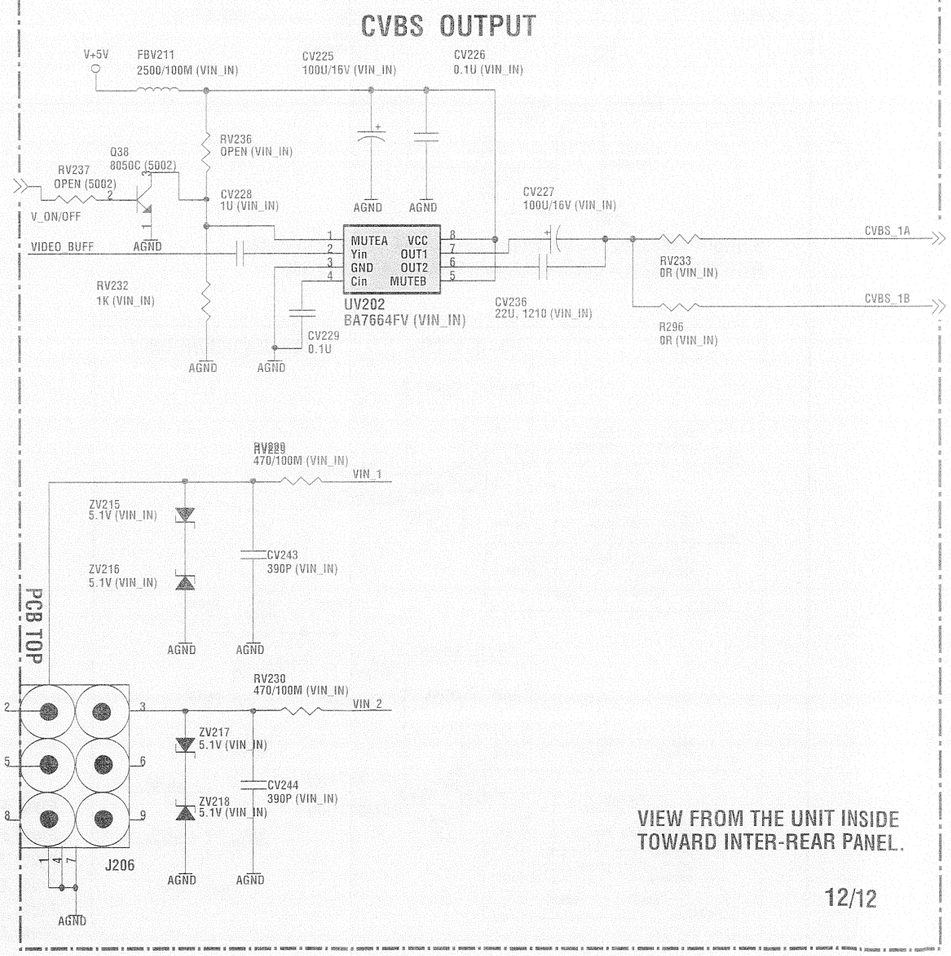
* according to models

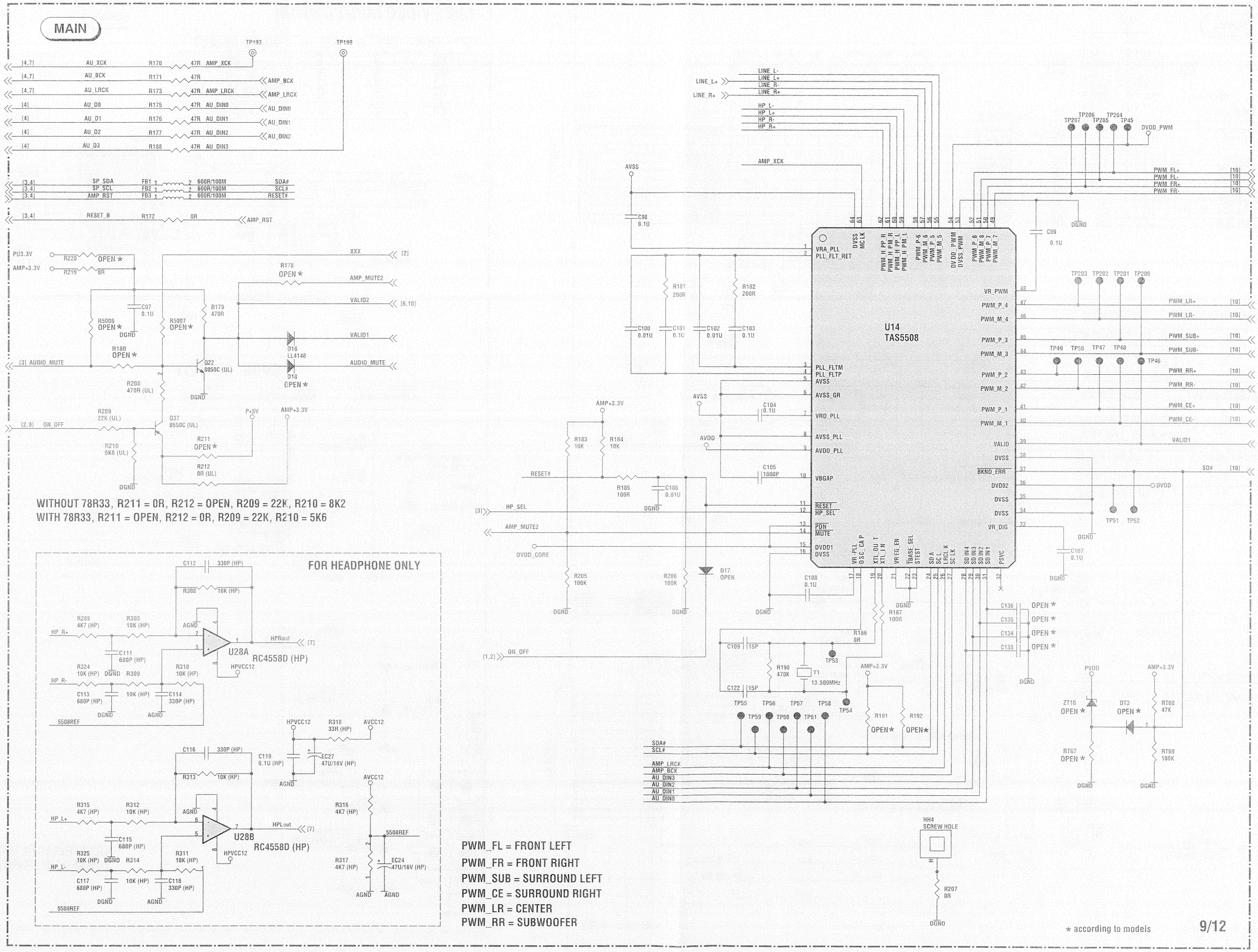
CVBS VIDEO INPUT SWITCH

Y \ Cmux	SEL_B	SEL_A	VIDEO SELECT
Y0	0	0	V_IN2
Y1	0	1	V_IN1
Y2	1	0	SUNPLUS_CVBS
Y3	1	1	V_IN3

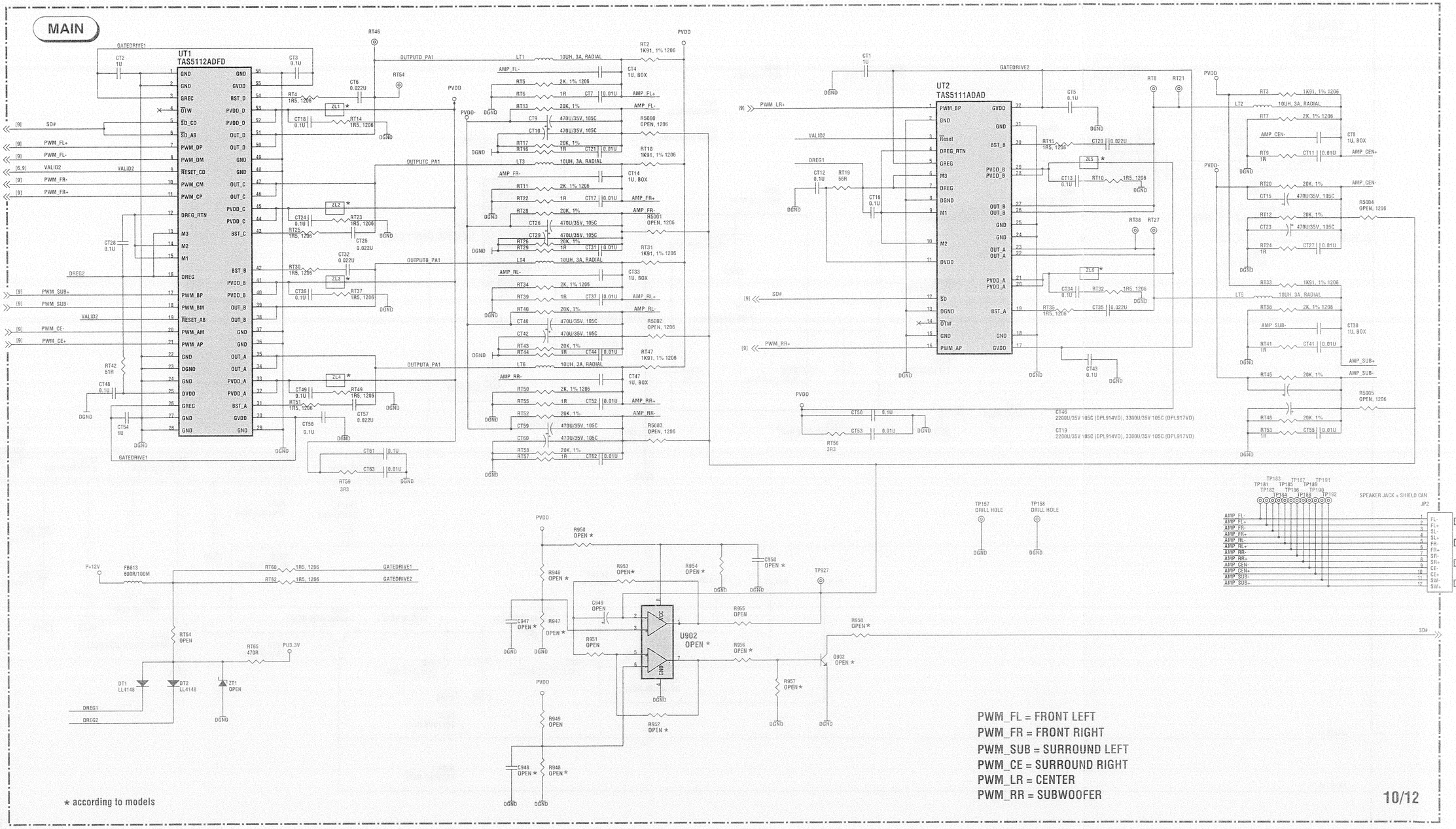


CVBS OUTPUT

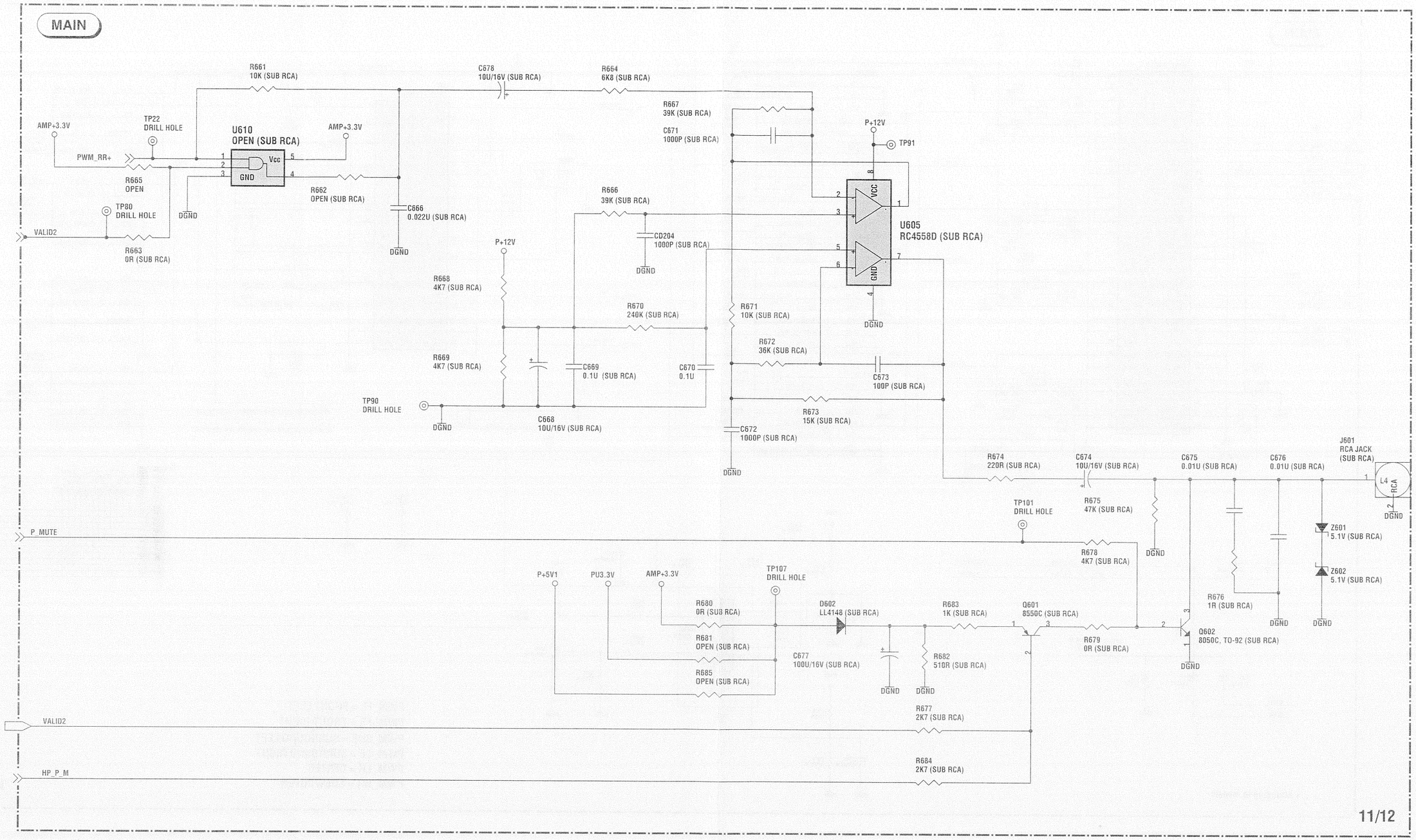



MAIN
TP193
TP199
[4,7] AU_XCK R170 47R AMP_XCK
[4,7] AU_BCK R171 47R AMP_BCK
[4,7] AU_LRCK R173 47R AMP_LRCK
[4] AU_D0 R175 47R AU_DIN0
[4] AU_D1 R176 47R AU_DIN1
[4] AU_D2 R177 47R AU_DIN2
[4] AU_D3 R188 47R AU_DIN3
[3,4] SP_SDA FB1 600R/100M SDA#
[3,4] SP_SCL FB2 600R/100M SCL#
[3,4] AMP_RST FB3 600R/100M RESET#
[3,4] RESET_B R172 0R AMP_RST
PU3.3V
AMP+3.3V
R220 OPEN *
R219 0R
XXX [2]
R178 OPEN *
AMP_MUTE2
VALID2 [6,10]
VALID1
AUDIO_MUTE
C97 0.1U
R5006 OPEN *
R5007 OPEN *
R179 470R
R180 OPEN *
[3] AUDIO_MUTE
Q22 8050C (UL)
R208 470R (UL)
D16 LL4148
D18 OPEN *
DGND
[2,9] ON_OFF
R209 22K (UL)
Q37 8550C (UL)
R210 5K6 (UL)
R211 OPEN *
R212 0R (UL)
P+5V
AMP+3.3V
WITHOUT 78R33, R211 = 0R, R212 = OPEN, R209 = 22K, R210 = 8K2
WITH 78R33, R211 = OPEN, R212 = 0R, R209 = 22K, R210 = 5K6
FOR HEADPHONE ONLY
C112 330P (HP)
R308 10K (HP)
R209 4K7 (HP)
R303 10K (HP)
HP_R+
AGND
U28A RC4558D (HP)
HPRout [7]
HPVCC12
C111 680P (HP)
R324 10K (HP)
R309
R310 10K (HP)
HP_R-
C113 680P (HP)
10K (HP)
C114 330P (HP)
5508REF
C116 330P (HP)
R313 10K (HP)
R315 4K7 (HP)
R312 10K (HP)
HP_L+
U28B RC4558D (HP)
HPLout [7]
C115 680P (HP)
R325 10K (HP)
R314
R311 10K (HP)
HP_L-
C117 680P (HP)
10K (HP)
C118 330P (HP)
HPVCC12 R318 33R (HP) AVCC12
C119 0.1U (HP)
EC27 47U/16V (HP)
R316 4K7 (HP)
R317 4K7 (HP)
EC24 47U/16V (HP)
AVCC12
LINE_L+
LINE_R+
LINE L-
LINE L+
LINE R-
LINE R+
HP L-
HP L+
HP R-
HP R+
AVSS
AMP_XCK
C98 0.1U
R181 200R
R182 200R
C100 0.01U
C101 0.1U
C102 0.01U
C103 0.1U
U14
TAS5508
VRA_PLL
PLL_FLT_RET
PLL_FLTM
PLL_FLTP
AVSS
AVSS_GR
VRD_PLL
AVSS_PLL
AVDD_PLL
VBGAP
RESET
HP_SEL
PDN
MUTE
DVDD1
DVSS
PWM_H_PP_R
PWM_H_PM_R
PWM_H_PP_L
PWM_H_PM_L
PWM_P_6
PWM_M_6
PWM_P_5
PWM_M_5
DV_DD_PWM
DV_SS_PWM
PWM_P_8
PWM_M_8
PWM_P_7
PWM_M_7
VR_PWM
PWM_P_4
PWM_M_4
PWM_P_3
PWM_M_3
PWM_P_2
PWM_M_2
PWM_P_1
PWM_M_1
VALID
DVSS
BKND_ERR
DVDD2
DVSS
DVSS
VR_DIG
VR_PLL
OSC_CAP
XTL_OU_T
XTL_IN
VREG_EN
TBASE_SEL
STEST
SDA
SCL
LRCLK
SCLK
SDIN4
SDIN3
SDIN2
SDIN1
PSVC
DVDD_PWM
TP206 TP207 TP204 TP205 TP45
PWM_FL+ [10]
PWM_FL- [10]
PWM_FR+ [10]
PWM_FR- [10]
C99 0.1U
TP203 TP202 TP201 TP200
PWM_LR+ [10]
PWM_LR- [10]
PWM_SUB+ [10]
PWM_SUB- [10]
TP49 TP50 TP47 TP48 TP46
PWM_RR+ [10]
PWM_RR- [10]
PWM_CE+ [10]
PWM_CE- [10]
VALID1
SD# [10]
DVDD
TP51 TP52
C107 0.1U
R183 10K
R184 10K
RESET#
R185 100R
C106 0.01U
C104 0.1U
C105 1000P
HP_SEL [3]
AMP_MUTE2
DVDD_CORE
R205 100K
R206 100K
D17 OPEN
C108 0.1U
R187 100R
R186 0R
ON_OFF [1,2]
C109 15P
TP53
R190 470K
Y1 13.500MHz
C122 15P
TP55 TP56 TP57 TP58 TP54 TP59 TP60 TP61
R191 OPEN *
R192 OPEN *
C136 OPEN *
C135 OPEN *
C134 OPEN *
C133 OPEN *
PVDD
ZT10 OPEN *
DT3 OPEN *
RT68 47K
RT67 OPEN *
RT69 100K
SDA#
SCL#
AMP_LRCK
AMP_BCK
AU_DIN3
AU_DIN2
AU_DIN1
AU_DIN0
HH4 SCREW HOLE
R207 0R
PWM_FL = FRONT LEFT
PWM_FR = FRONT RIGHT
PWM_SUB = SURROUND LEFT
PWM_CE = SURROUND RIGHT
PWM_LR = CENTER
PWM_RR = SUBWOOFER
* according to models
9/12

MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD GRUNDPLATTE - SCHEMA DELLA PIASTRA PRINCIPALE - ESQUEMA DE LA PLATINA PRINCIPAL



MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD GRUNDPLATTE - SCHEMA DELLA PIASTRA PRINCIPALE - ESQUEMA DE LA PLATINA PRINCIPAL



VOLTAGE CHARTS

SPHE8281DL(U3)

PIN NO.	DVD PB	PIN NO.	DVD PB	PIN NO.	DVD PB	PIN NO.	DVD PB
1	1.623	64	3.232	127	ADDR.BUS	190	3.173
2	0.086	65	0.005	128	0	191	0
3	0.504	66	3.206	129	ADDR.BUS	192	0.68
4	2.036	67	5.01	130	ADDR.BUS	193	0.694
5	0.955	68	5.01	131	ADDR.BUS	194	3.174
6	2.036	69	3.09	132	3.24	195	0.708
7	2.035	70	3.037	133	ADDR.BUS	196	0
8	2.035	71	0.03	134	ADDR.BUS	197	3.158
9	2.035	72	3.131	135	ADDR.BUS	198	3.58
10	2.037	73	4.649	136	3.241	199	1.574
11	2.031	74	0.247	137	ADDR.BUS	200	1.619
12	2.034	75	2.365	138	ADDR.BUS	201	0.007
13	2.042	76	ADDR.BUS	139	ADDR.BUS	202	0.007
14	0.745	77	1.601	140	ADDR.BUS	203	0.007
15	0.735	78	0.017	141	0.003	204	3.105
16	2.039	79	0	142	0.003	205	0.003
17	2.029	80	0.43	143	3.219	206	1.603
18	0	81	0.002	144	3.219	207	0.061
19	0	82	0.002	145	DATA.BUS	208	0.058
20	3.197	83	0	146	DATA.BUS	209	3.151
21	3.196	84	3.147	147	DATA.BUS	210	3.191
22	0	85	0	148	DATA.BUS	211	0.414
23	0	86	1.747	149	DATA.BUS	212	3.114
24	3.196	87	DATA.BUS	150	0	213	0.901
25	2.031	88	DATA.BUS	151	DATA.BUS	214	0.908
26	1.645	89	DATA.BUS	152	DATA.BUS	215	2.311
27	1.625	90	DATA.BUS	153	DATA.BUS	216	2.311
28	0.92	91	DATA.BUS	154	ADDR.BUS		
29	0.906	92	3.238	155	ADDR.BUS		
30	0.885	93	DATA.BUS	156	ADDR.BUS		
31	0.904	94	DATA.BUS	157	ADDR.BUS		
32	1.096	95	DATA.BUS	158	ADDR.BUS		
33	1.096	96	3.238	159	ADDR.BUS		
34	0.243	97	3.238	160	ADDR.BUS		
35	1.636	98	3.238	161	ADDR.BUS		
36	0.208	99	0	162	ADDR.BUS		
37	1.561	100	2.229	163	ADDR.BUS		
38	1.618	101	0.238	164	0.012		
39	1.616	102	DATA.BUS	165	0.012		
40	0	103	DATA.BUS	166	0.012		
41	3.205	104	DATA.BUS	167	3.184		
42	1.625	105	DATA.BUS	168	0		
43	1.62	106	DATA.BUS	169	ADDR.BUS		
44	0	107	DATA.BUS	170	ADDR.BUS		
45	0	108	DATA.BUS	171	0.003		
46	3.206	109	DATA.BUS	172	0.003		
47	1.606	110	DATA.BUS	173	3.203		
48	1.605	111	ADDR.BUS	174	0.003		
49	0.008	112	3.24	175	0.004		
50	0.008	113	1.769	176	0.003		
51	0.004	114	0	177	0.001		
52	1.404	115	0.013	178	0		
53	3.232	116	ADDR.BUS	179	1.601		
54	3.065	117	ADDR.BUS	180	1.6		
55	3.216	118	ADDR.BUS	181	2.508		
56	1.77	119	ADDR.BUS	182	3.2		
57	3.209	120	ADDR.BUS	183	1.895		
58	0.006	121	1.763	184	0.62		
59	0.002	122	ADDR.BUS	185	0.599		
60	0	123	3.239	186	1.221		
61	2.483	124	3.24	187	0.69		
62	0.001	125	0.003	188	3.172		
63	0.003	126	ADDR.BUS	189	0		

SDRAM (U7)

PIN NO.	DVD PB
1	3.204
2	DATA.BUS
3	3.204
4	DATA.BUS
5	DATA.BUS
6	0
7	DATA.BUS
8	DATA.BUS
9	3.204
10	DATA.BUS
11	DATA.BUS
12	0
13	DATA.BUS
14	3.204
15	2.609
16	3.14
17	3.099
18	3.088
19	0.141
20	0.181
21	0.004
22	ADDR.BUS
23	ADDR.BUS
24	ADDR.BUS
25	ADDR.BUS
26	ADDR.BUS
27	3.204
28	0
29	ADDR.BUS
30	ADDR.BUS
31	ADDR.BUS
32	ADDR.BUS
33	ADDR.BUS
34	ADDR.BUS
35	ADDR.BUS
36	NC
37	0.851
38	1.797
39	2.609
40	NC
41	0
42	DATA.BUS
43	3.204
44	DATA.BUS
45	DATA.BUS
46	0
47	DATA.BUS
48	DATA.BUS
49	3.204
50	DATA.BUS
51	DATA.BUS
52	0
53	DATA.BUS
54	0

SN74HC244(U13)

PIN NO.	DVD PB
1	3.189
2	3.912
3	DATA.BUS
4	3.914
5	DATA.BUS
6	3.937
7	DATA.BUS
8	3.919
9	DATA.BUS
10	0
11	3.92
12	DATA.BUS
13	3.199
14	DATA.BUS
15	3.199
16	DATA.BUS
17	0.381
18	DATA.BUS
19	3.196
20	3.202

SN74HC374(U12)

PIN NO.	DVD PB
1	0
2	0.038
3	ADDR.BUS
4	ADDR.BUS
5	0.039
6	0.038
7	ADDR.BUS
8	ADDR.BUS
9	3.207
10	0
11	2.624
12	0.037
13	ADDR.BUS
14	ADDR.BUS
15	0.037
16	3.106
17	ADDR.BUS
18	ADDR.BUS
19	3.206
20	3.206

FLASH 8M(U4)

PIN NO.	DVD PB
1	ADDR.BUS
2	ADDR.BUS
3	ADDR.BUS
4	ADDR.BUS
5	ADDR.BUS
6	ADDR.BUS
7	ADDR.BUS
8	ADDR.BUS
9	NC
10	NC
11	3.202
12	2.992
13	NC
14	NC
15	NC
16	ADDR.BUS
17	ADDR.BUS
18	ADDR.BUS
19	ADDR.BUS
20	ADDR.BUS
21	ADDR.BUS
22	ADDR.BUS
23	ADDR.BUS
24	ADDR.BUS
25	ADDR.BUS
26	2.911
27	0
28	2.902
29	DATA.BUS
30	NC
31	DATA.BUS
32	NC
33	DATA.BUS
34	NC
35	DATA.BUS
36	NC
37	3.196
38	DATA.BUS
39	NC
40	DATA.BUS
41	NC
42	DATA.BUS
43	NC
44	DATA.BUS
45	ADDR.BUS
46	0
47	0
48	DATA.BUS

AZ5954(U8)

PIN NO.	DVD PB
1	1.618
2	0.02
3	0.02
4	1.626
5	1.626
6	1.607
7	0.02
8	5.03
9	5.03
10	0
11	1.579
12	1.579
13	0.02
14	0.02
15	0.002
16	0.002
17	1.156
18	1.156
19	0
20	0.002
21	5.04
22	0
23	1.641
24	0.02
25	0.02
26	1.626
27	1.627
28	0.004

24C04(U6)

PIN NO.	DVD PB
1	0
2	0
3	0
4	0
5	5.004
6	5.005
7	0
8	5.009

LM833D(U17)

PIN NO.	DVD PB
1	5.819
2	5.826
3	5.82
4	0
5	5.819
6	5.828
7	5.818
8	11.45

AME1117(U1)

PIN NO.	DVD PB
1	0
2	3.241
3	4.92

PCM1807(U19)

PIN NO.	DVD PB
1	2.386
2	0
3	4.75
4	3.197
5	0
6	1.62
7	1.596
8	1.616
9	1.067
10	NC
11	NC
12	NC
13	2.365
14	2.37

AME1117(U2)

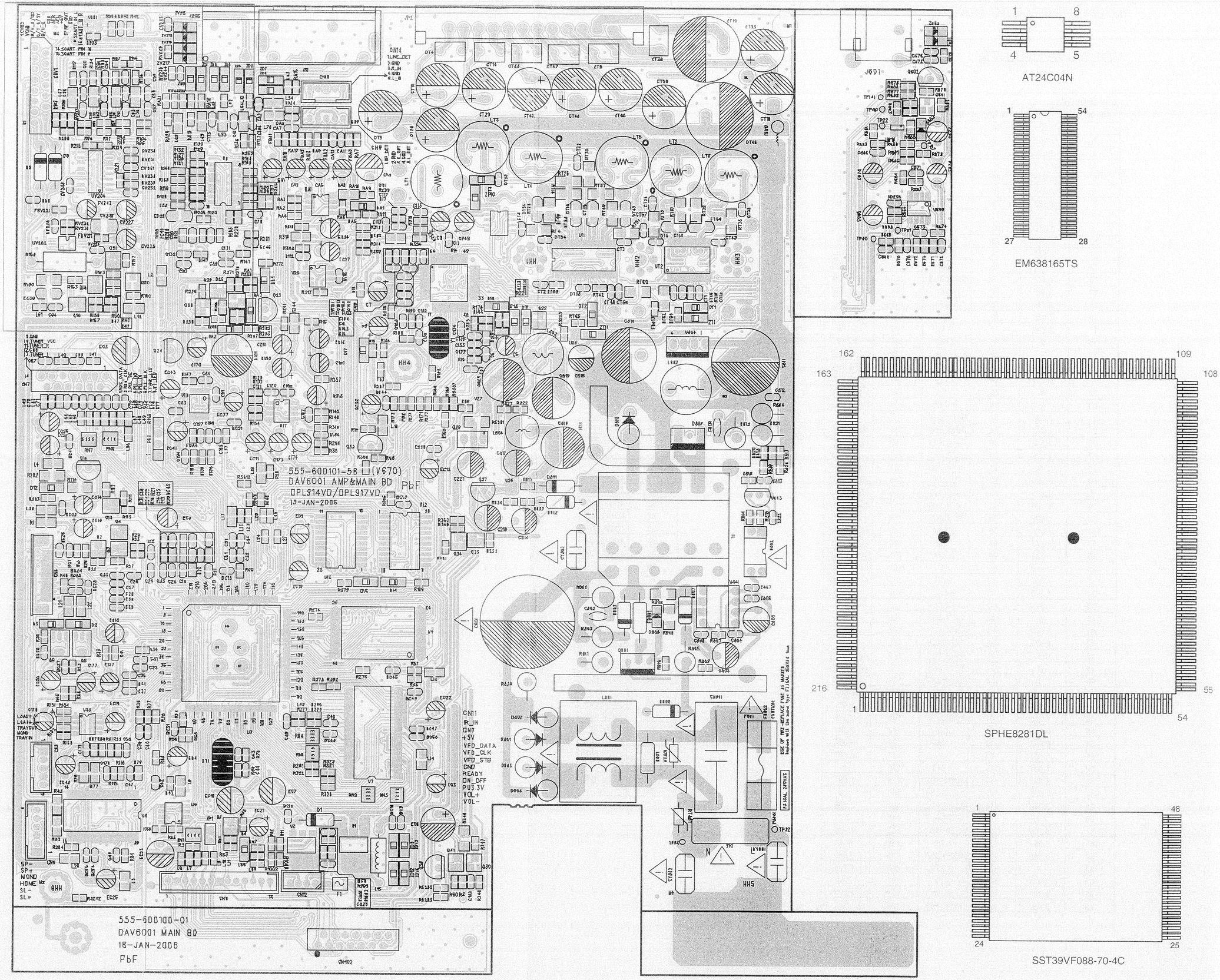
PIN NO.	DVD PB
1	0.538
2	1.783
3	4.16

BA6208(U30)

PIN NO.	DVD PB
1	5.007
2	1.128
3	0
4	1.914
5	0.008
6	NC
7	0
8	0.008

Main P.C.B.
Platine principale
Grundplatte
Piastra principale
Platina principal

Component side
Côté composants
Bestückungsseite
Lato componenti
Lado componentes



AT24C04N

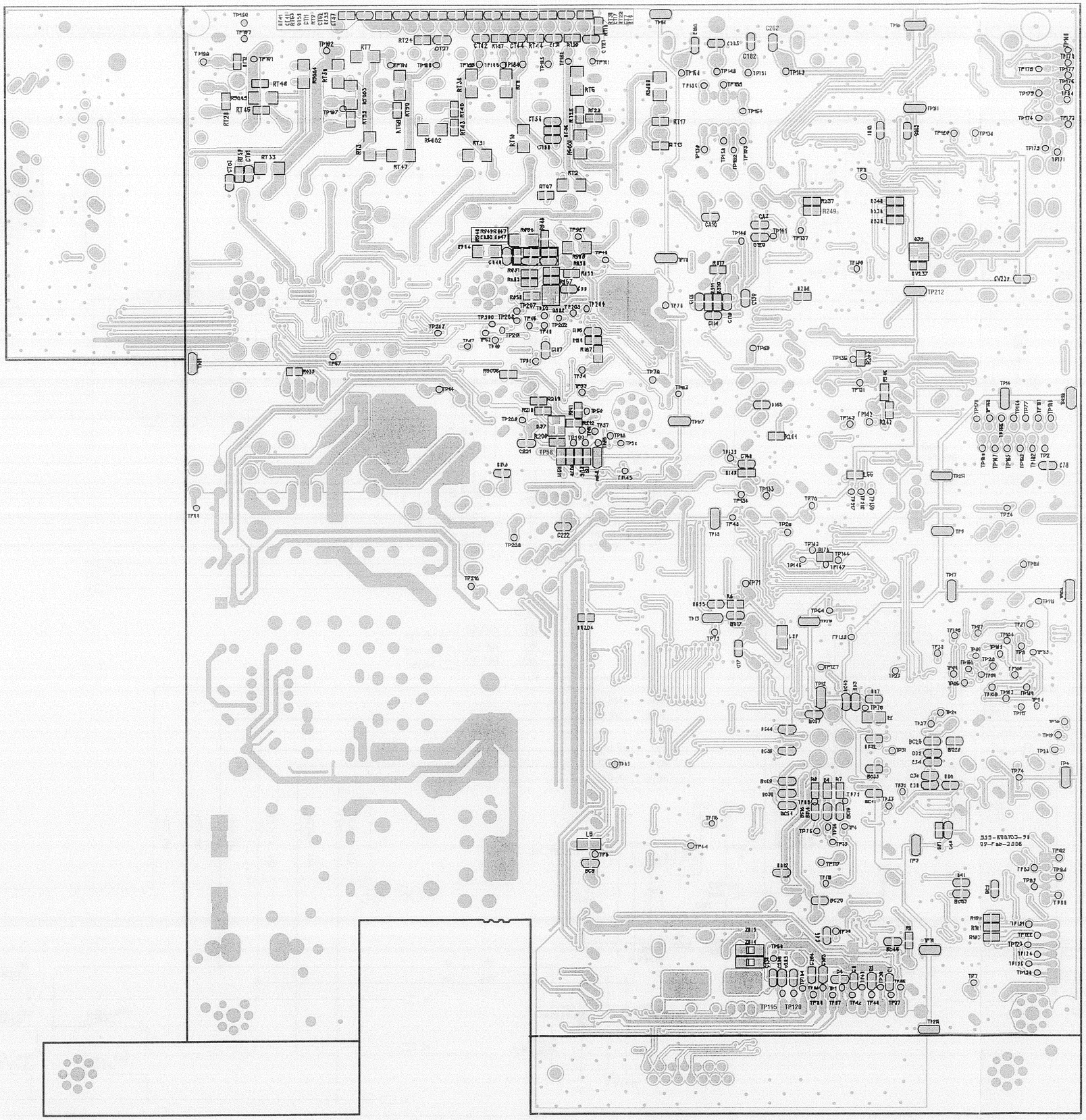
EM638165TS

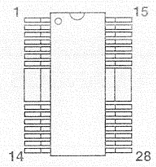
SPHE8281DL

SST39VF088-70-4C

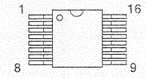
Main P.C.B.
Platine principale
Grundplatte
Piastra principale
Platina principal

Solder side
Côté soudure
Lötseite
Lato saldature
Lado del cobre

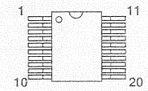




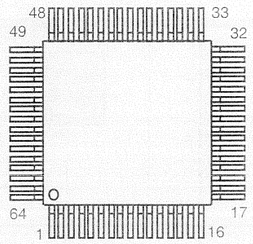
BA5954FP



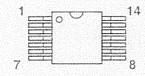
CD74HC4052M96



SN74HC374DWR



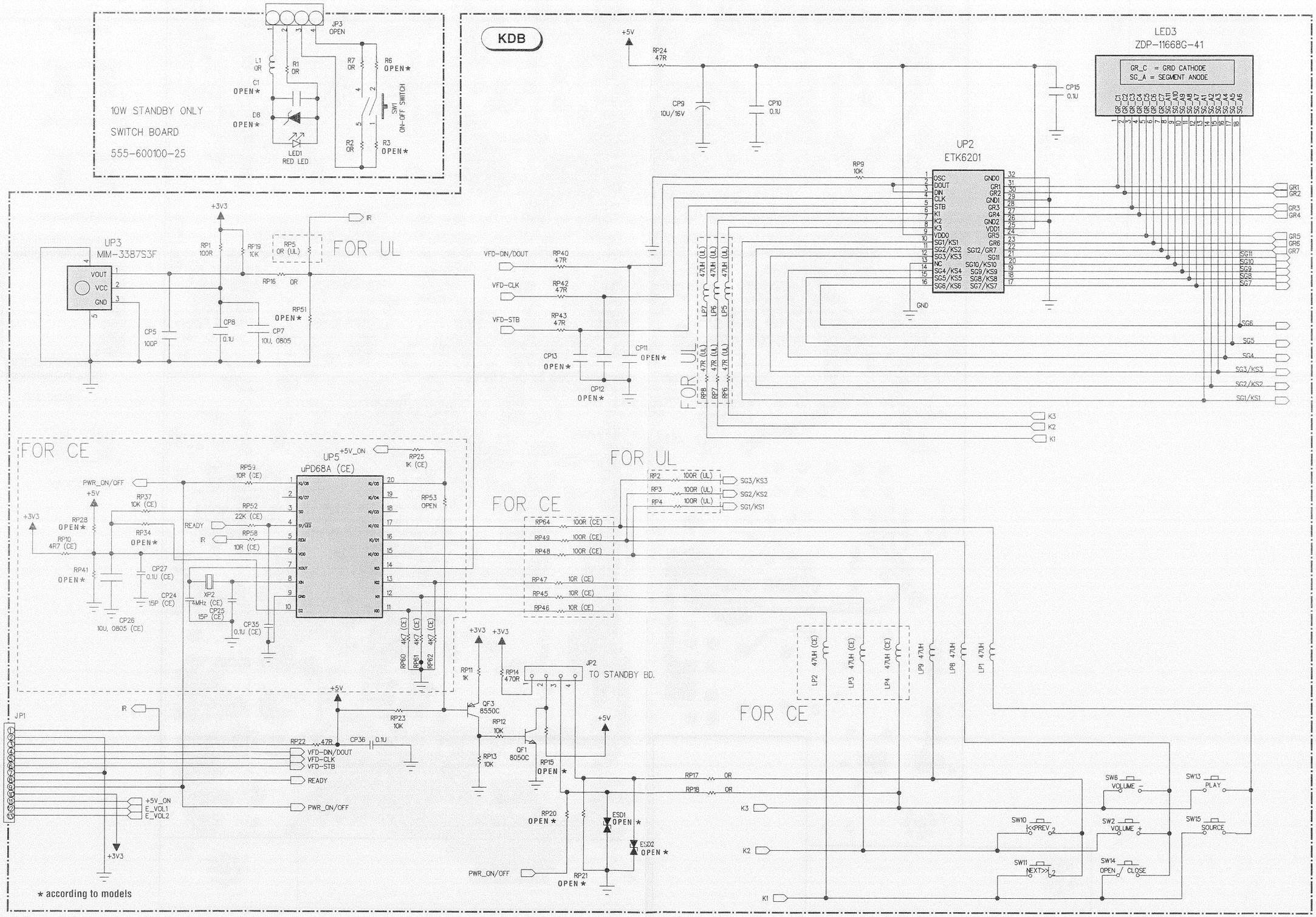
SN0407137



PCM1807PWR

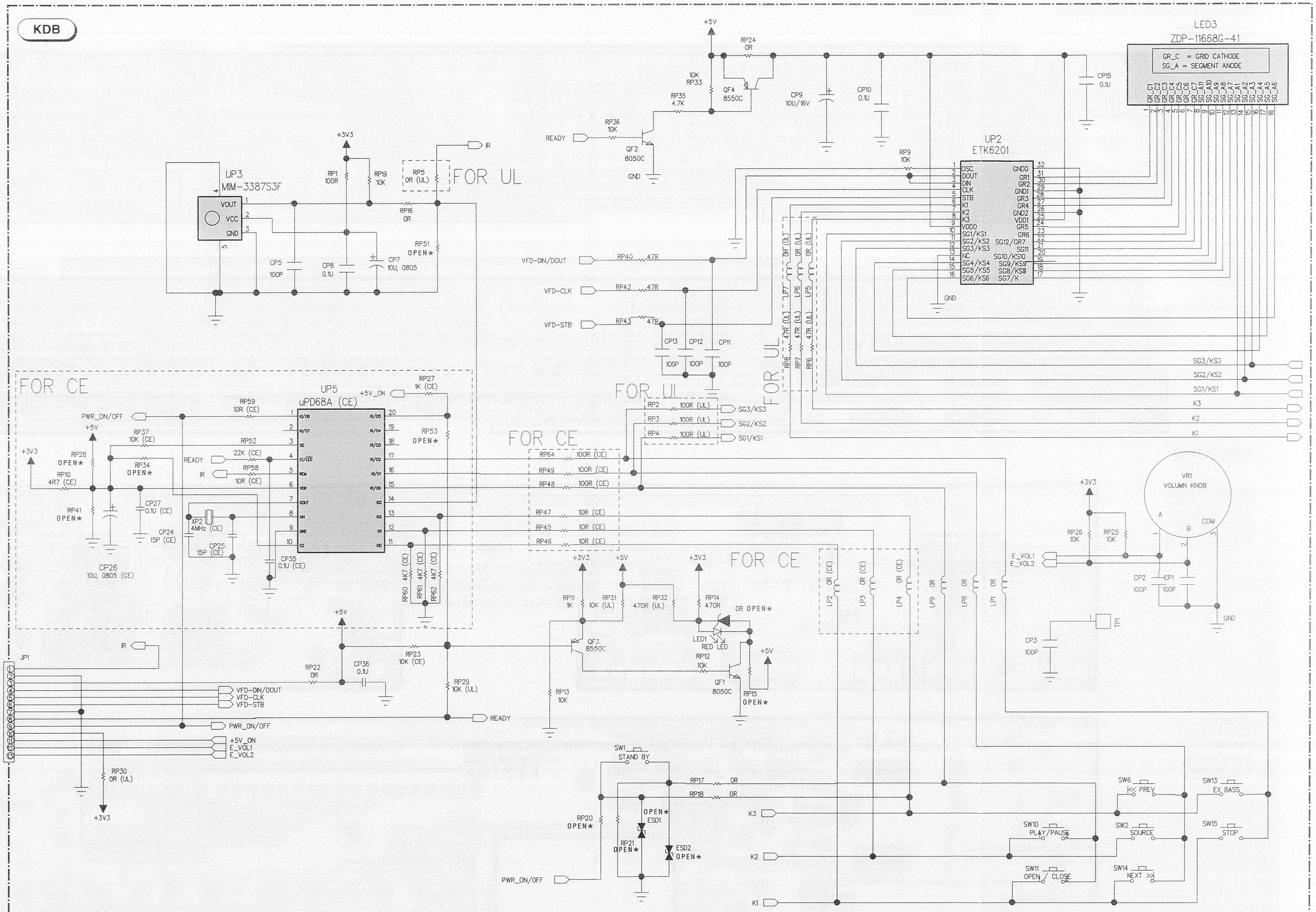
CONTROL / DISPLAY SCHEMATIC DIAGRAM - SCHEMA COMMANDES / AFFICHEUR - SCHALTBILD BEDIENTEIL / ANZEIGE - SCHEMA COMANDI / INDICATORE - ESQUEMA MANDOS / INDICADOR

DPL914VD



CONTROL / DISPLAY SCHEMATIC DIAGRAM - SCHEMA COMMANDES / AFFICHEUR - SCHALTBILD BEDIENTEIL / ANZEIGE - SCHEMA COMANDI / INDICATORE - ESQUEMA MANDOS / INDICADOR

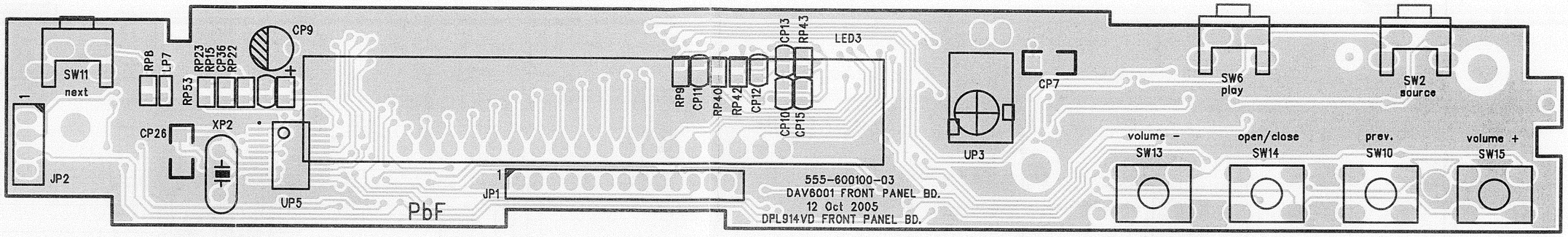
DPL917VD



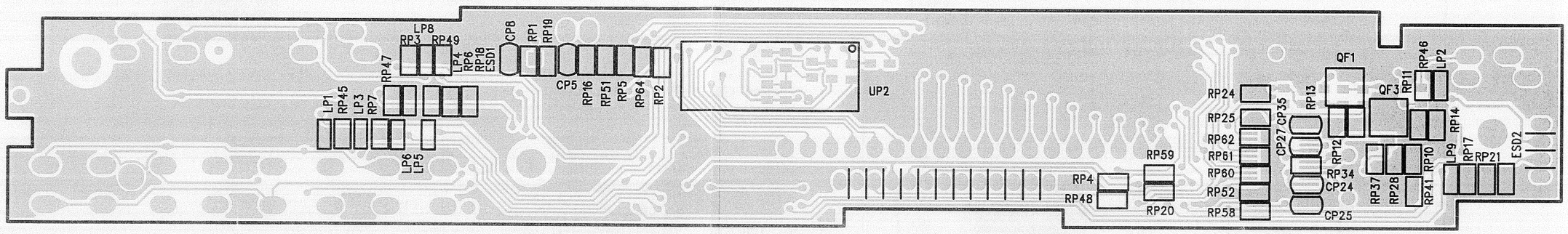
Controls / display P.C.B.
Platine commandes / afficheurs
Ltpl. Bedienteil / Anzeige
Piastra comandi / indicatore
Platina de mandos / indicadores

Component side
Côté composants
Bestückungsseite
Lato componenti
Lado componentes

DPL914VD

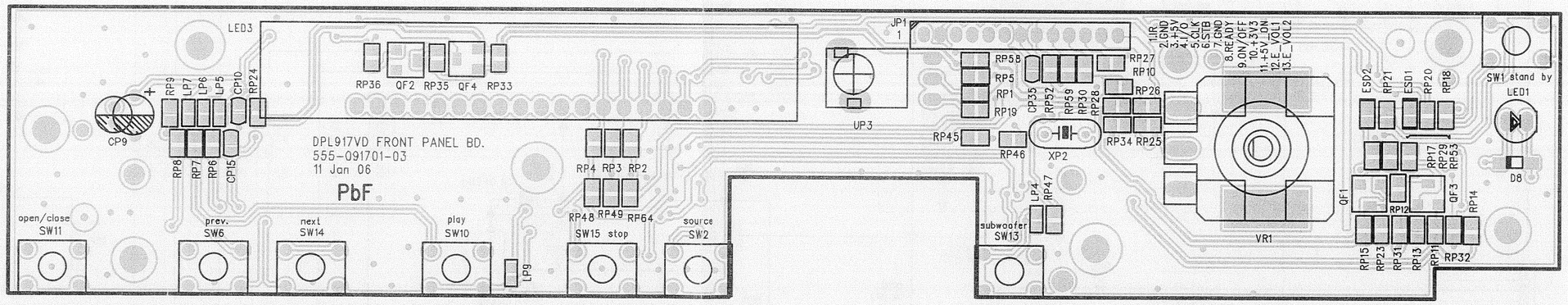


Solder side
Côté soudure
Lötseite
Lato saldature
Lado del cobre

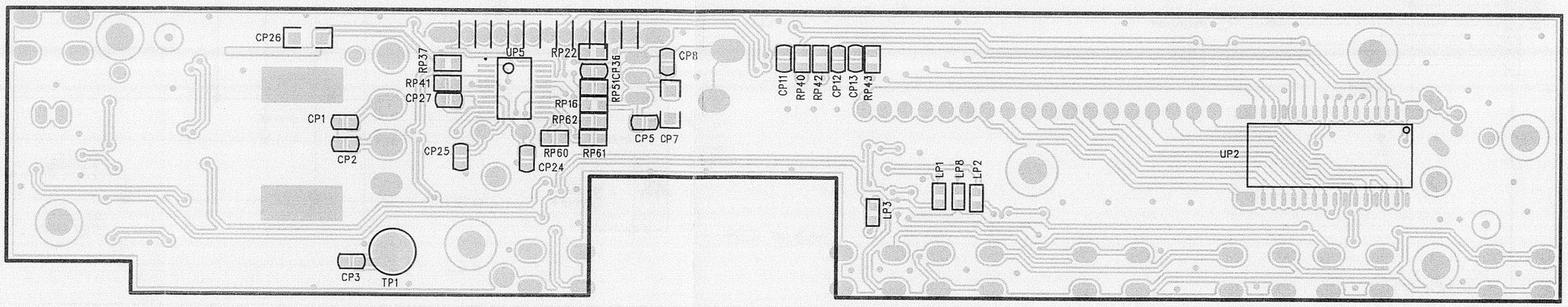


DPL917VD

Component side
Côté composants
Bestückungsseite
Lato componenti
Lado componentes

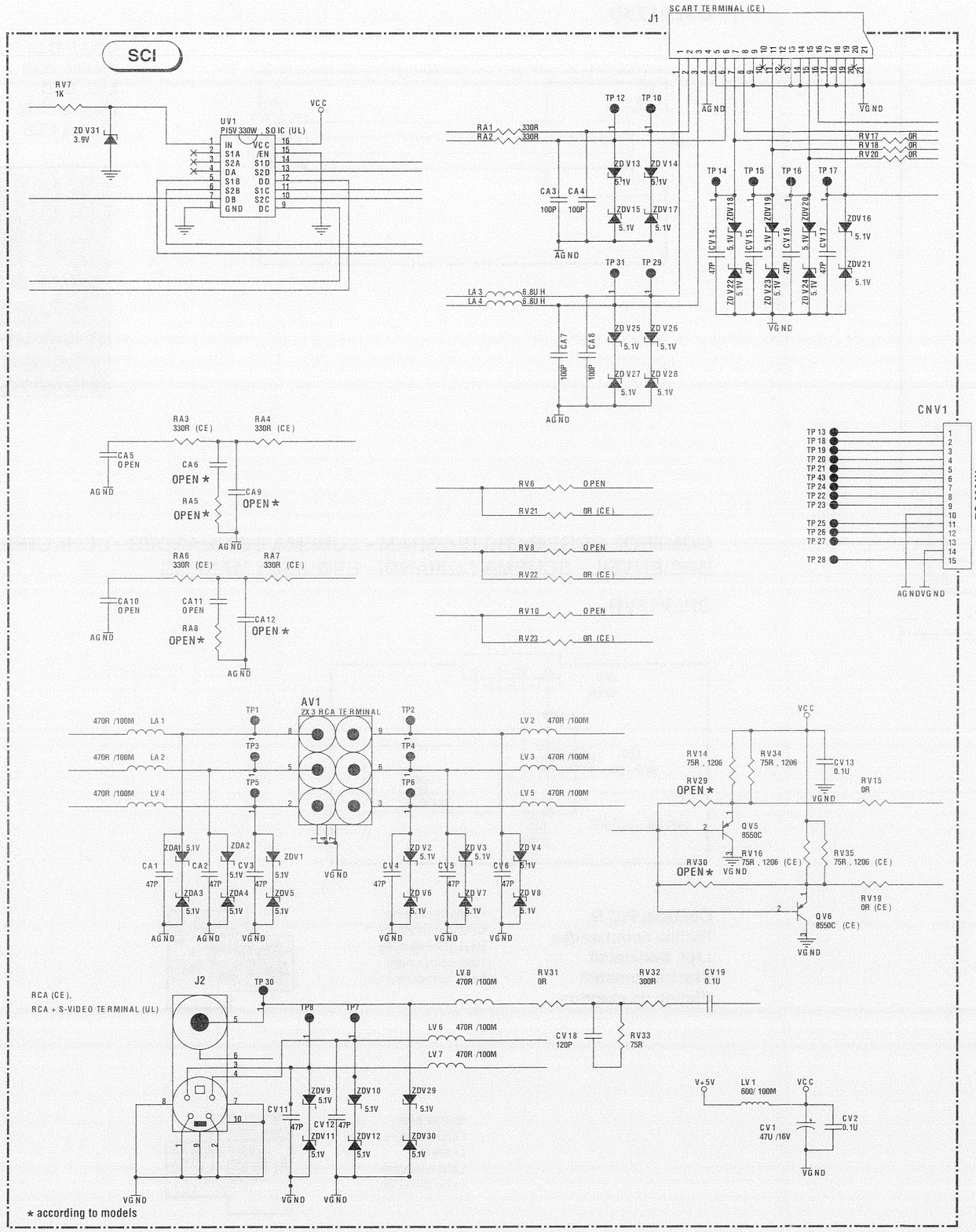


Solder side
Côté soudure
Lötseite
Lato saldature
Lado del cobre



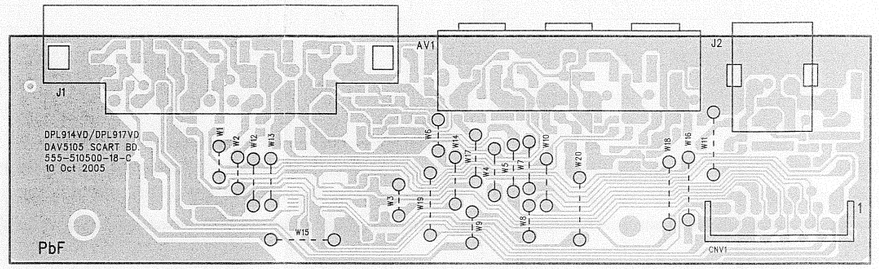
ASMP1130
First issue 06/06

SCART INTERFACE SCHEMATIC DIAGRAM - SCHEMA DE L'INTERFACE PERITELEVISION - SCHALTBILD EUROPA NORMBUCHSE - SCHEMA PRESA PERITEL - ESQUEMA EUROTOMA

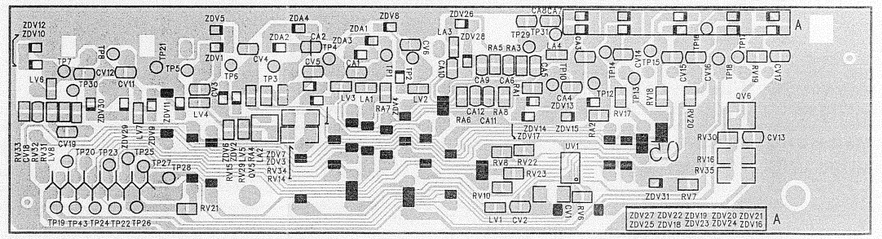


Scart interface P.C.B.
Platine interface péritélévision
Ltpl. Europa Normbuchse
Piastra presa peritel
Platina eurotoma

Component side
Côté composants
Bestückungsseite
Lato componenti
Lado componentes

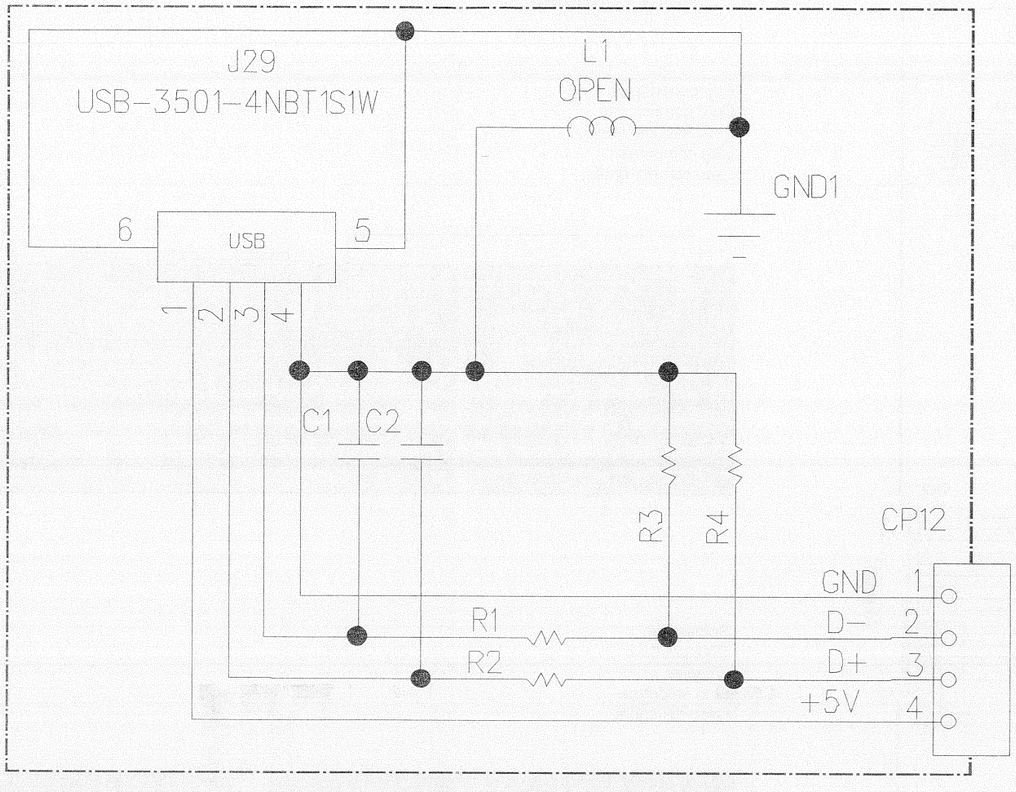


Solder side
Côté soudure
Lötseite
Lato saldature
Lado del cobre



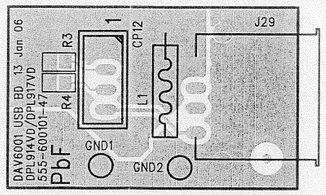
USB SHEMATIC DIAGRAM - SCHEMA DE LA PLATINE USB - SCHALTBILD USB - SCHEMA DELLA PIASTRA USB - ESQUEMA DE LA PLATINA USB

DPL914VD

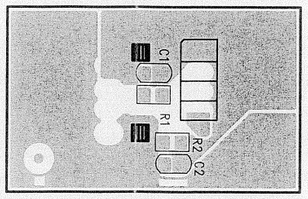


USB P.C.B.
Platine USB
Ltpl. USB
Piastra USB
Platina USB

Component side
Côté composants
Bestückungsseite
Lato componenti
Lado componentes

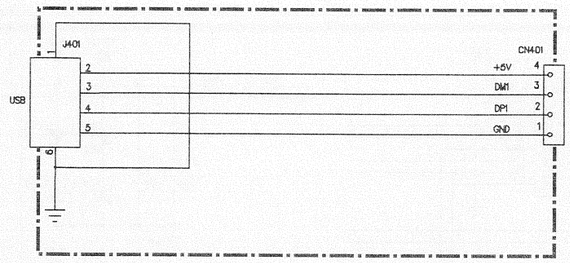


Solder side
Côté soudure
Lötseite
Lato saldatura
Lado del cobre

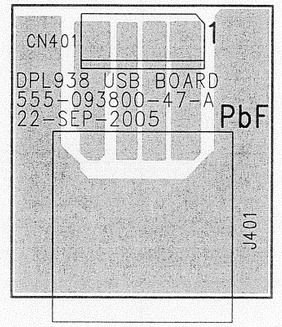


USB SHEMATIC DIAGRAM - SCHEMA DE LA PLATINE USB - SCHALTBILD USB - SCHEMA DELLA PIASTRA USB - ESQUEMA DE LA PLATINA USB

DPL917VD

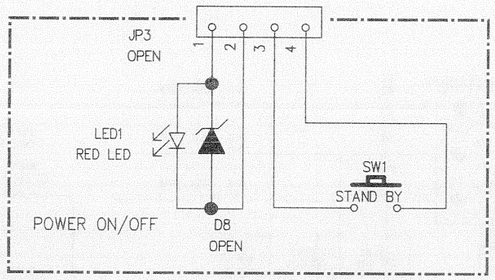


USB P.C.B.
Platine USB
Ltpl. USB
Piastra USB
Platina USB



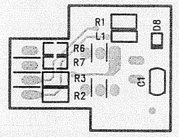
CONTROL SCHEMATIC DIAGRAM - SCHEMA COMMANDES - SCHALTBILD BEDIENTEIL - SCHEMA COMANDI - ESQUEMA MANDOS

DPL917VD

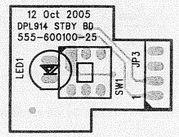


Controls P.C.B.
Platine commandes
Ltpl. Bedienteil
Piastra comandi
Platina de mandos

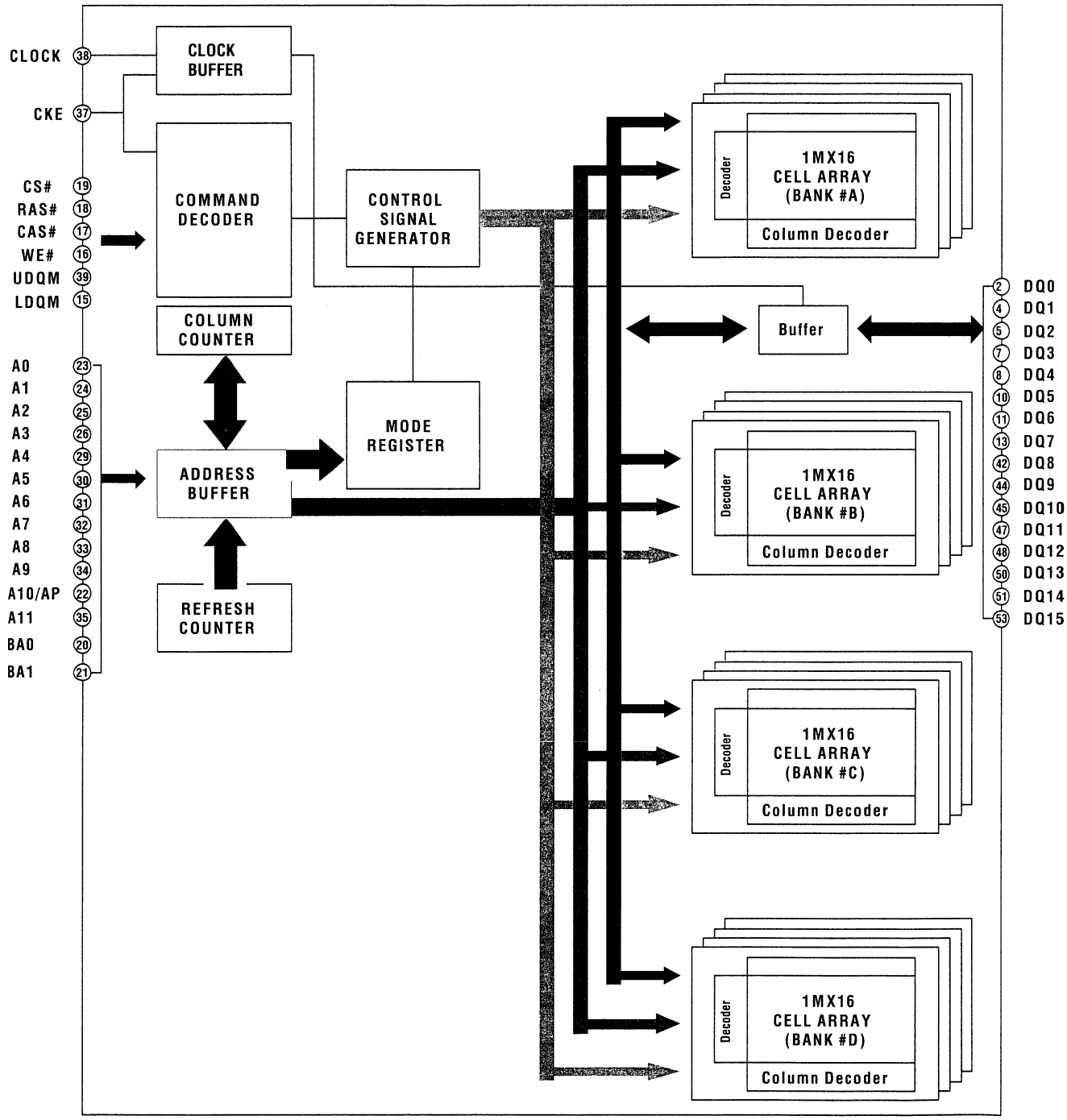
Component side
Côté composants
Bestückungsseite
Lato componenti
Lado componentes



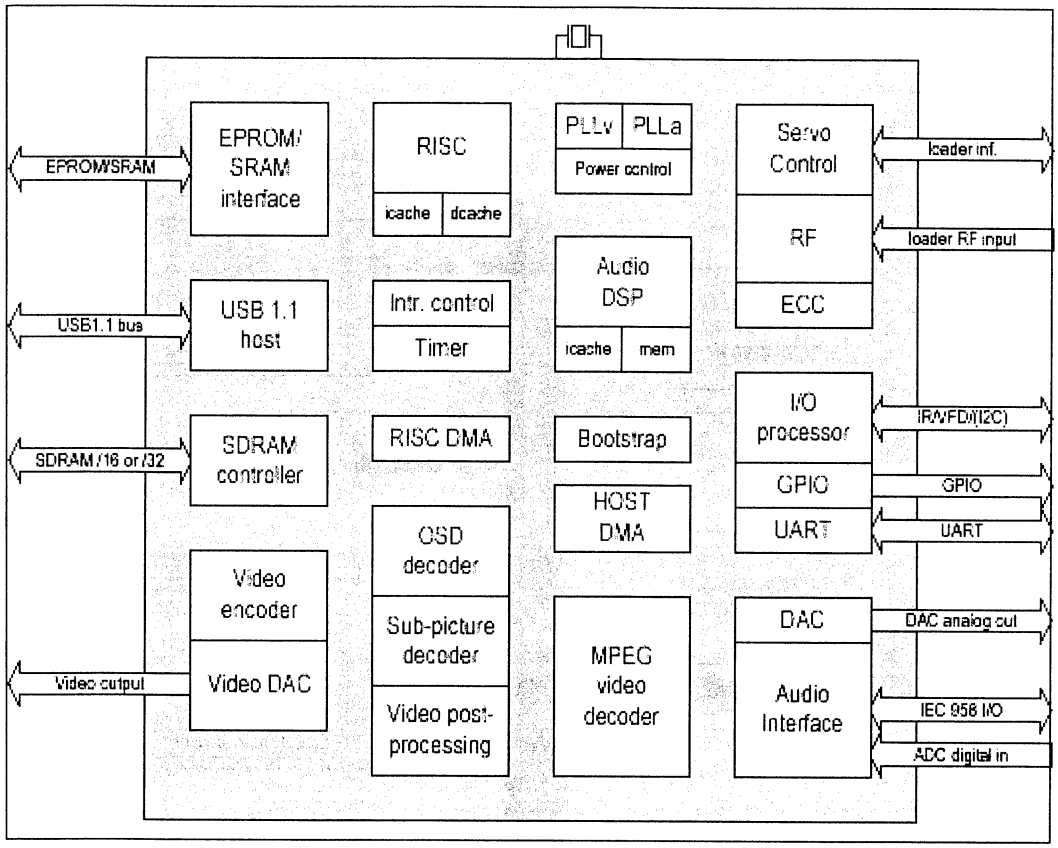
Solder side
Côté soudure
Lötseite
Lato saldatura
Lado del cobre



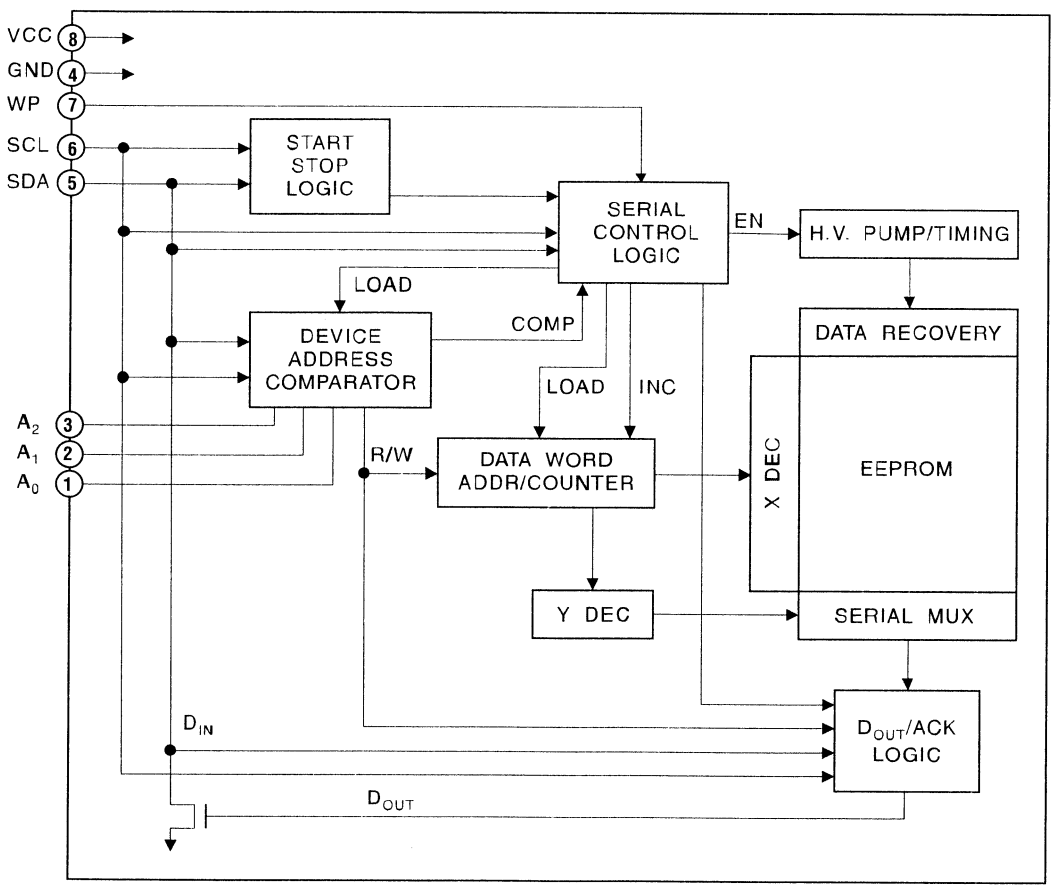
ASMP1130
First issue 06/06


CLOCK
CKE
CS#
RAS#
CAS#
WE#
UDQM
LDQM
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10/AP
A11
BA0
BA1
CLOCK BUFFER
COMMAND DECODER
CONTROL SIGNAL GENERATOR
COLUMN COUNTER
MODE REGISTER
ADDRESS BUFFER
REFRESH COUNTER
Buffer
Decoder
1MX16 CELL ARRAY (BANK #A)
Column Decoder
1MX16 CELL ARRAY (BANK #B)
1MX16 CELL ARRAY (BANK #C)
1MX16 CELL ARRAY (BANK #D)
DQ0
DQ1
DQ2
DQ3
DQ4
DQ5
DQ6
DQ7
DQ8
DQ9
DQ10
DQ11
DQ12
DQ13
DQ14
DQ15

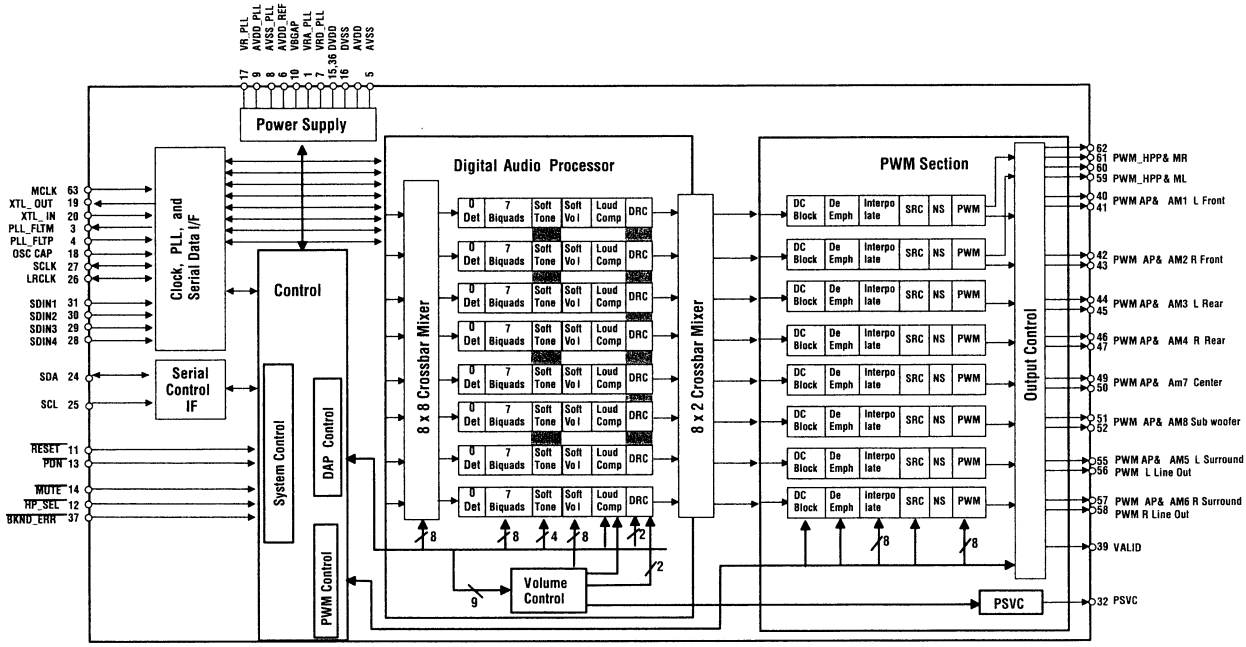
U03
SPHE8281DL



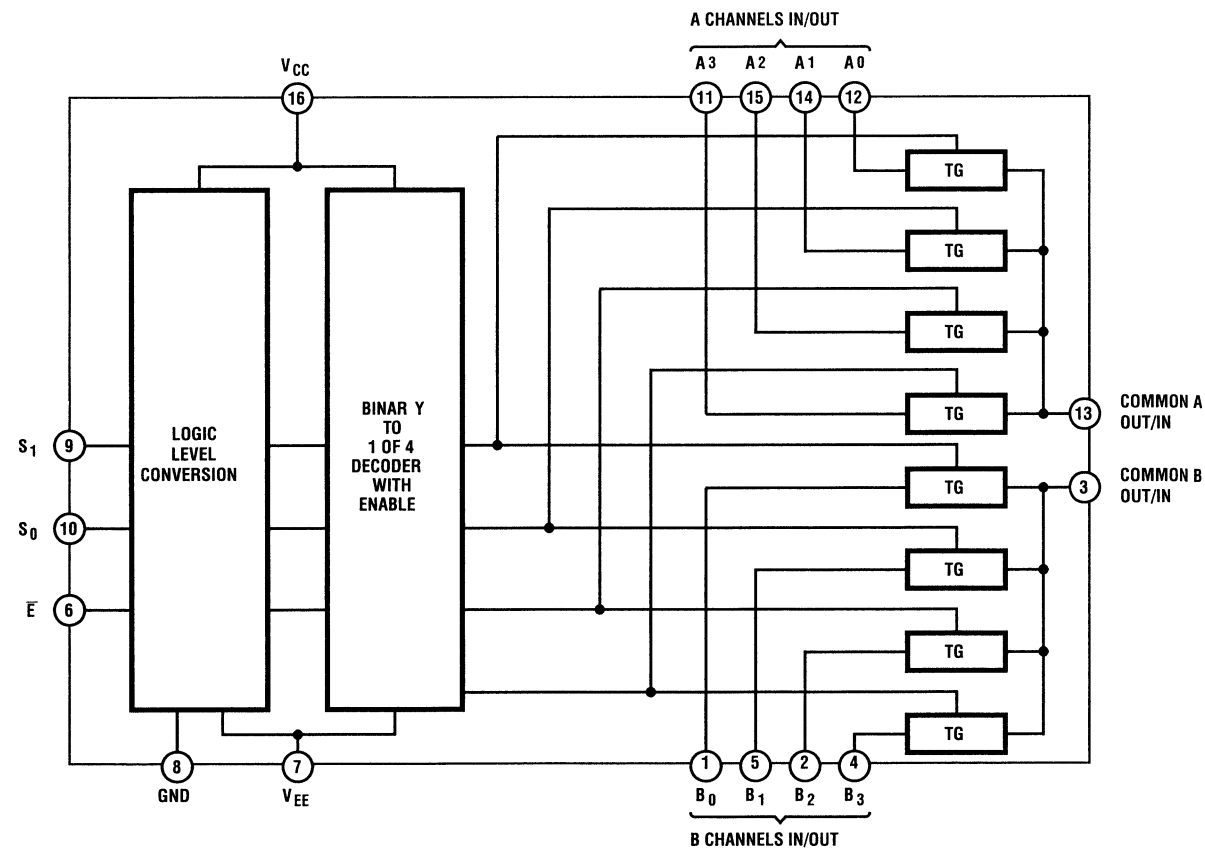
U06
AT24C04N



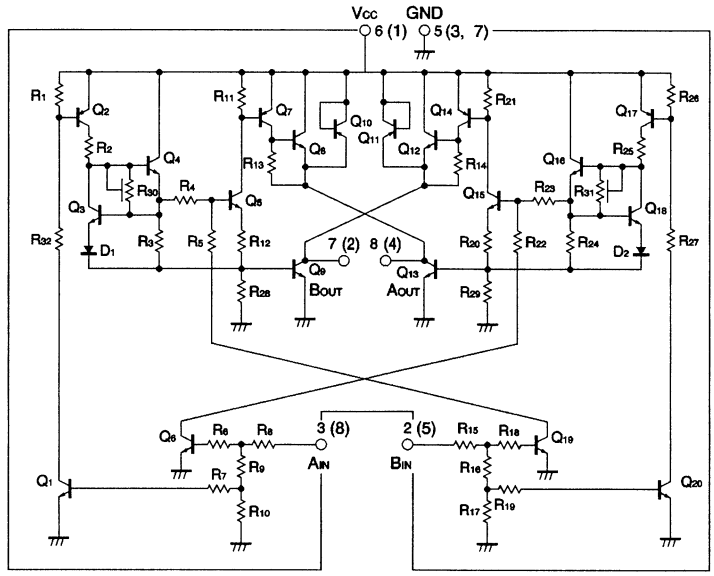
U14
SN0407137



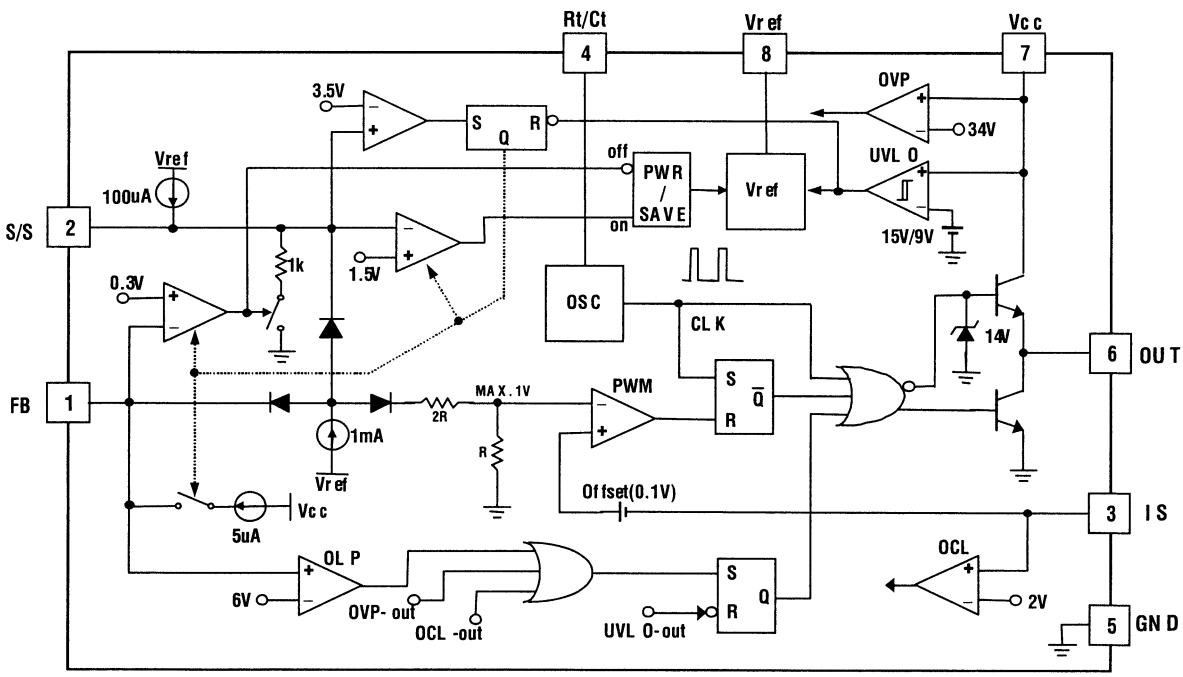
U09
CD74HC4052



U30
BA6208F

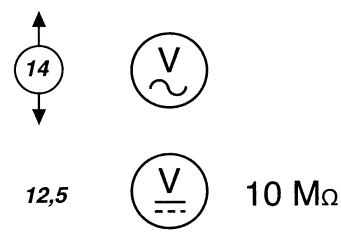


U801
FAN7554



Abbreviations - Abreviations - Abkürzungen - Abbreviazioni - Abreviaciones

AC	Alternating Current
ACC	Automatic Colour Control
AGC	Automatic Gain Control
A_IF	Audio IF
ALC	Automatic Level Control
AMP	Amplifier
APC	Automatic Phase Control
AV	Audio-Video
BPF	Band Pass Filter
CH	Channel
CLK	Clock
COMP	Comparator
CONV	Converter
CSYNC	Composite Synch
CTL	Control
DC	Direct Current
DET	Detector
DIG	Digital
ENV	Envelope
EQ	Equalizer
FG	Frequency Generator
GND	Ground
GCA	Gain Controlled Amplifier
HPF	High Pass Filter
I.R	Infra Red
ID	Identification
INP/IN	Input
KDB	Key Display Board
LIM	Limitter
LPF	Low Pass Filter
PCB	Printed Circuit Board
PG	Pulse Generator
PLL	Phase Locked Loop
PWM	Pulse Width Modulation
SCL	Serial Clock
SDA	Serial Data
SMPS	Switch Mode Power Supply
SW	Switch
VCA	Voltage Controlled Amplifier
VCO	Voltage Controlled Oscillator
VD	Supply Voltage Digital
VE	Voltage (Ever)
VS	Voltage (Switched)



This technical documentation is for use by maintenance technicians only
Documentation technique exclusivement destinée aux professionnels de la maintenance
Diese Angaben und Hinweise sind ausschließlich für den Service des Fachhändlers bestimmt
Documentazione tecnica destinata esclusivamente ai tecnici dell'assistenza
Documentación técnica destinada exclusivamente a los profesionales de mantenimiento

Thomson multimedia
Scandinavia AB
Florettgatan 29 C
S-25467 Helsingborg (Sweden)
Tel. : 042 25 75 00

Thomson Sales UK Limited
Bath Road
West Drayton
Middlesex UB7 0DB (England)

Thomson Sales
Germany & Austria GmbH
Karl-Wiechert-Allee 74
30625 Hannover

Thomson
Consumer Electronics Poland
ul.Gen.L. Okulickiego 7/9
05-500 Piaseczno (Varsovie)
Tel. : (22) 757 10 80

Thomson Sales Europe
46, quai Alphonse Le Gallo
92648 Boulogne cedex
Tel. : 01 41 86 60 00
Internet : www.thomson-network.com

Thomson multimedia
Czech s.r.o.
ul. Dopravaku - dum Genius 1
Dolni Chabry
CZ - 18400 Prague 8
Tel. : (2) 688 67 70

Thomson multimedia
Switzerland
Seewenweg 5
CH-4153 Reinach
Tel. : (61) 716 96 60

Thomson multimedia
Hungary KFT
Lajos u. 78. II.em.
H-1036 Budapest
Tel. : 00 36 14 5334/80

Thomson multimedia
Sales Portugal
Avenida da Boavista, 3521
4106-139 Porto
Tel. : +35 12 26 18 95 95

Thomson multimedia
Sales Italy
Via Po' 13/15
20098 San Giuliano Milanese (Milano)
Tel.: (02) 98 892 265

Thomson multimedia
Sales Spain
Avenida Isla Graciosa, 1
Edificio Ancora
Parque Empresarial La Marina
28700 San Sebastián de los Reyes (Madrid)
Tel. : (91) 384 14 19

The description and characteristics given here are of informative significance only, and non committal. To keep up the high quality of our products, we reserve the right to make any changes or improvement without previous notice. • Les descriptions et caractéristiques figurant sur ce document sont données à titre d'information et non d'engagement. En effet, soucieux de la qualité de nos produits, nous nous réservons le droit d'effectuer, sans préavis, toute modification ou amélioration. • Die Beschreibungen und Daten in dieser Anleitung dienen nur zur Information und sind nicht bindend. Um die Qualität unserer Produkte ständig zu verbessern, behalten wir uns das Recht auf Änderungen vor. • Le descrizioni e le caratteristiche date su questo documento sono fornite a semplice titolo informativo e senza impegno. Ci riserviamo il diritto di eseguire, senza preavviso, qualsiasi modifica o miglioramento. • Las descripciones y características que figuran en este documento se dan a título de información y no de compromiso. En efecto, en bien de la calidad de nuestros productos, nos reservamos el derecho de efectuar, sin previo aviso, cualquier modificación o mejora.